CEC
2.5.0.0
Getting Started

Issue 01

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Notice

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Contents

1 Using the CEC

The cognitive engagement center (CEC) is a product of Huawei Cloud. You can log in to the Huawei Cloud official website and select the CEC product to learn more.

Before using the CEC, an enterprise needs to apply for trial use or subscribe to the CEC and configure available resources for the CEC. The following figure shows the process of using the CEC.

Figure 1-1 CEC usage process

Registering with Huawei Cloud

To use any Huawei Cloud product, you need to complete account registration and real-name authentication before applying for a free trial or purchasing the product.

1. Log in to **Huawei Cloud official website** and click **Register** in the upper right corner. On the registration page, enter account information and click **Register** to submit the registration information.
2. Return to the official website home page after the registration is successful. Click **Console** in the upper right corner. On the login page, enter the registered account and password. After the login is successful, the Huawei Cloud console is displayed.
3. If real-name authentication has not been performed on the enterprise after the first login, click **Verify** to complete enterprise authentication as prompted. For details about the authentication, see **Overall Process**.

Applying for Commercial Use

If you choose to purchase the CEC for commercial use, the resources applied for during the trial period can no longer be used. You need to apply for them again. You need to apply for the following resources for the CEC in commercial use for common call businesses:

- Number resources: You can apply to purchase numbers from Huawei Cloud or connect to self-owned numbers. For details about how to apply for number resources, see **Managing Numbers**.
- Call center instance: You need to subscribe to a call center instance to configure agents, skill queues, and other functions to implement call businesses. For details, click **here** to see how to apply for commercial use.
- Other resources: You also need to purchase agent, IVR, TTS, and ASR resources for a complete call center instance based on business requirements. For details, click **here** to see how to purchase resources.

2 Applying for Commercial Use

You can subscribe to the CEC after a sound understanding of the CEC.

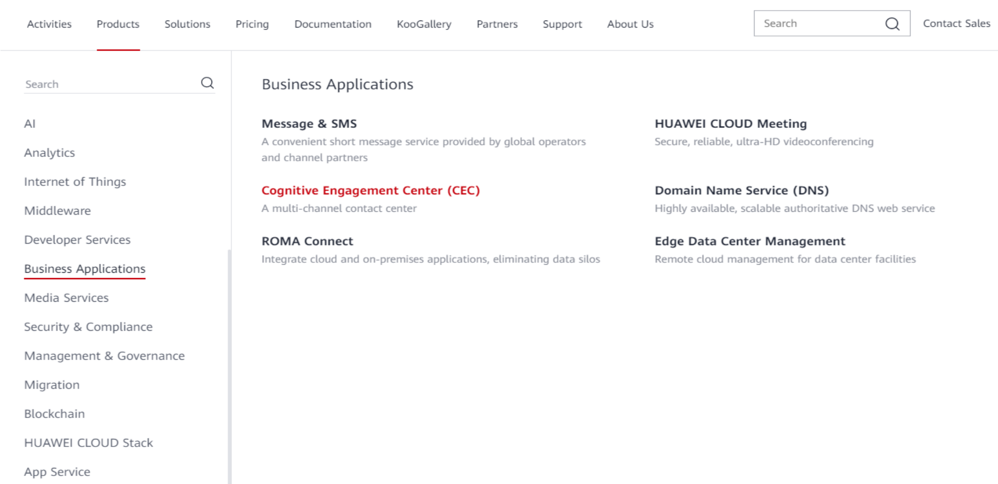
Prerequisites

- For details about the pricing for commercial use, see **Pricing Details**.
- After you apply for commercial use, trial numbers will become unavailable. Therefore, you need to apply for number resources in advance. For details, see **Applying for Number Resources**.

Procedure

Step 1 Choose **Products** > **Business Applications** > **Cognitive Engagement Center (CEC)**. The CEC home page is displayed.

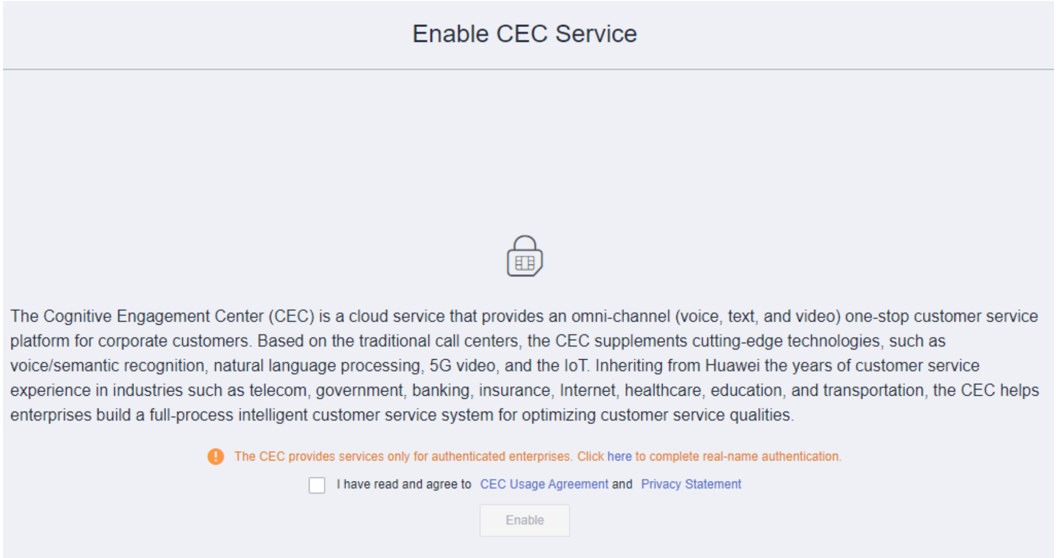
Figure 2-1 Selecting the CEC



Step 2 Click **Buy Now**. The page for purchasing the CEC is displayed.

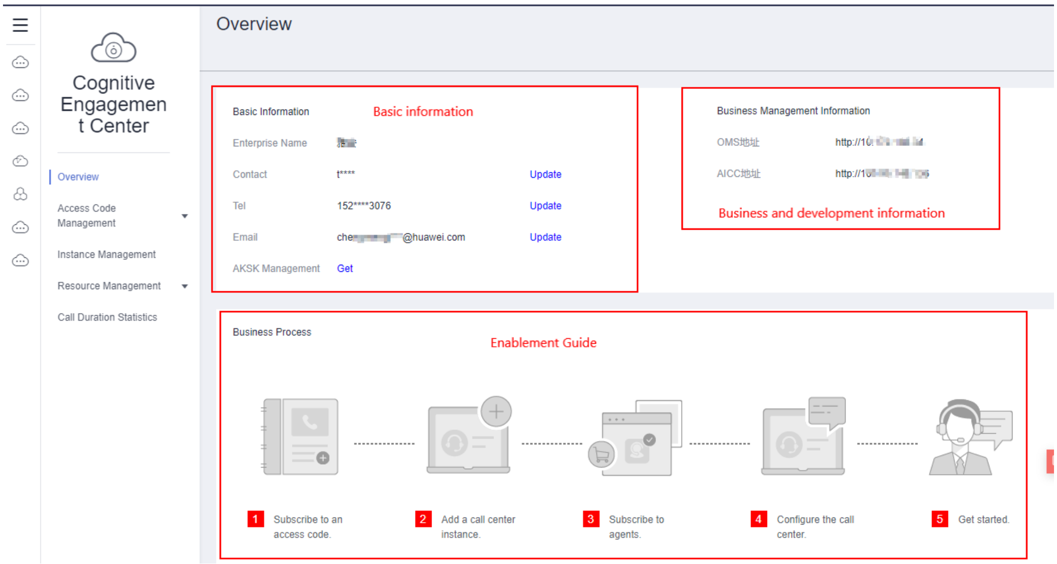
On the **Enable CEC Service** page, select **I have read and agree to CEC Usage Agreement and Privacy Statement** and click **Enable**.

Figure 2-2 Enabling the CEC service



Step 3 After the service is enabled, click **Console** to access the Huawei Cloud console. Choose ☰ > **Service List** > **Business Applications** > **Cognitive Engagement Center**. The CEC console is displayed.

Figure 2-3 CEC console



Step 4 Choose **Customer Engagement Center** > **Resource Management** > **Access Codes**. The access code management page is displayed.

Apply for an access code in either of the following modes:

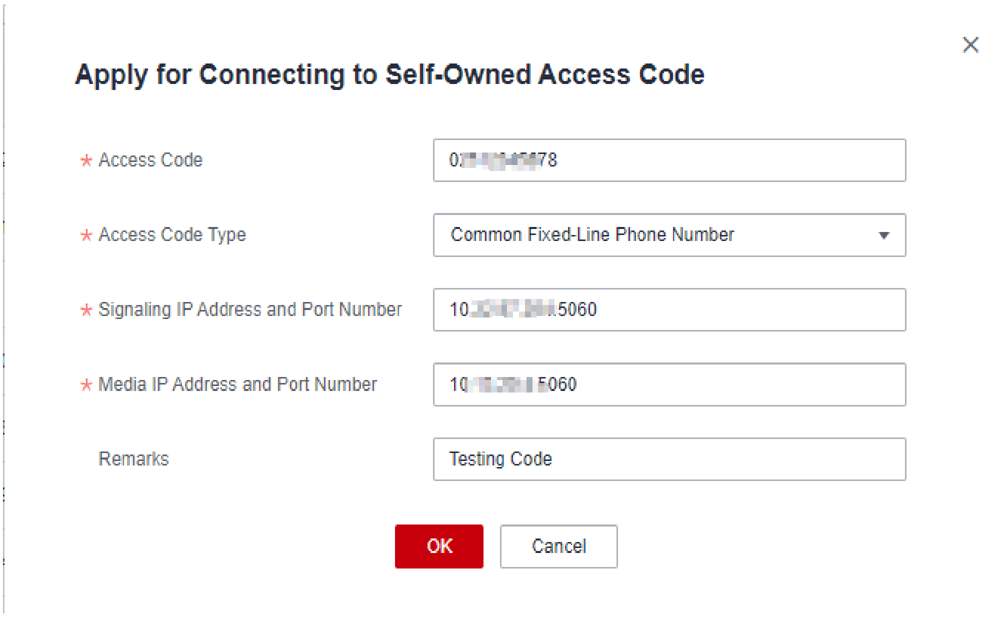
- Applying for purchasing Huawei access code: To apply for a Huawei access code, send the scanned copy of your business license, legal person information, business description, scripts, and number requirements to Huawei by email. Huawei then applies for an access code from the carrier. After the application is successful, subscribe to the access code on the CEC console. In this mode, you need to pay the monthly rental of the access code in addition to the call fees based on the actual usage.

- Applying for connecting to self-owned access code: If you have a self-owned access code, provide it to Huawei for interconnection. Huawei charges line integration maintenance fees based on the interconnection commissioning situation. For details, contact the CEC product team. The carrier charges you call fees based on your number usage.

Both modes take a certain handling period. For details, see **Managing Numbers**. The following describes how to apply for connecting a self-owned access code.

1. Choose **Self-Owned Access Code**, click **Click here to apply for connecting to a self-owned access code**. The application page is displayed.
2. Enter the access code information as prompted and click **OK**.

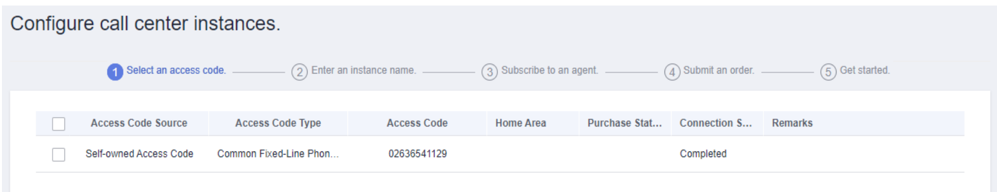
Figure 2-4 Apply for Connecting to Self-Owned Access Code page



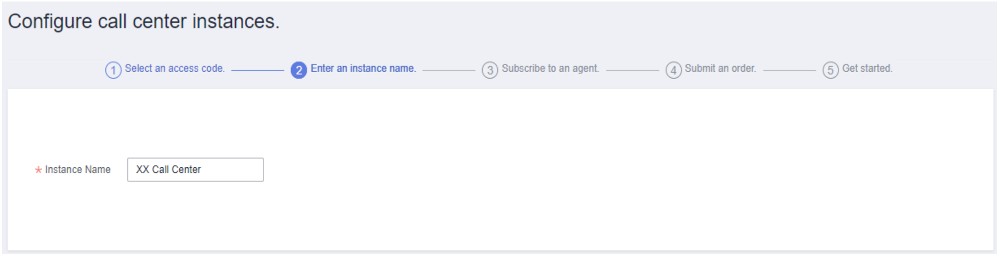
3. After the configuration is complete, you can view that **Connection Status** of the access code changes to **Completed** on the **Self-Owned Access Code** tab page.

Step 5 Choose **Cognitive Engagement Center** > **Resource Management** > **Instance Management** to add a call center instance.

1. Click **Create Call Center Instance** in the upper right corner. The page for adding an instance is displayed.
2. Select the desired access code and click **Next**.

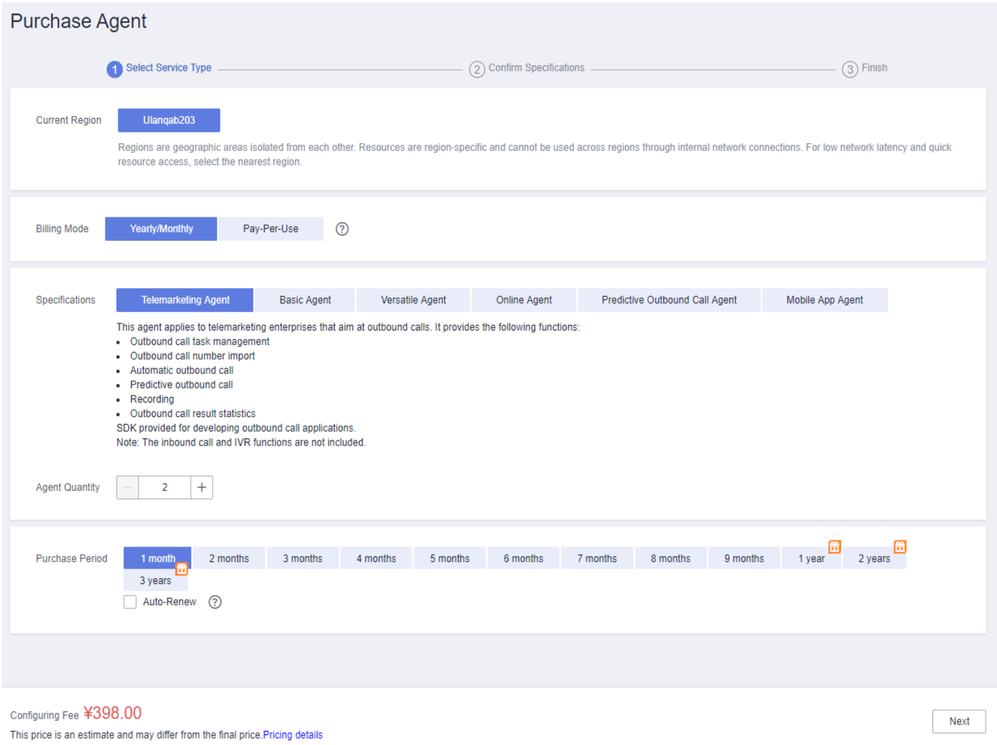


3. Set **Instance Name** and click **Next**.

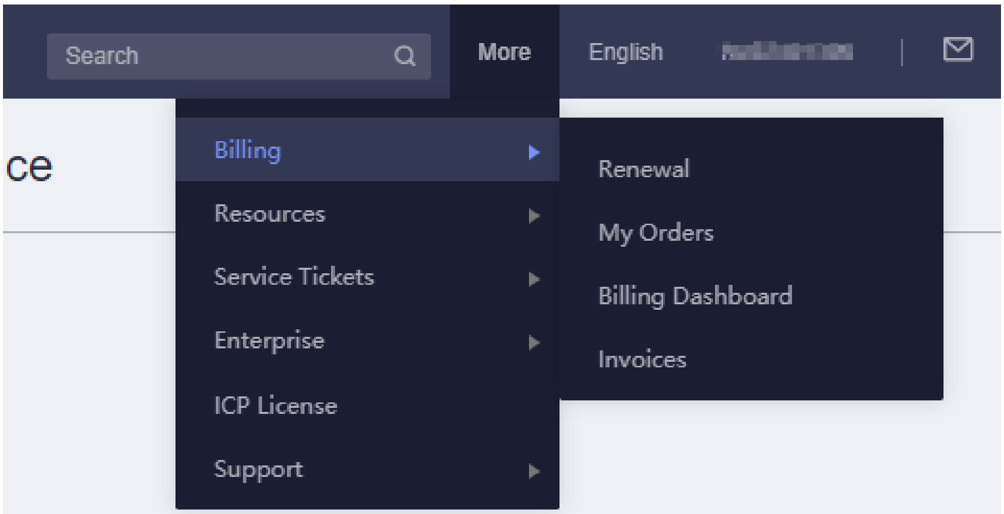


4. Select the desired billing mode, specifications, number of agents, and subscription period, and click **Next**.

   For details about the billing modes, click **Pricing details**.



5. On the **Confirm Specifications** page, confirm the fee information, select **I have read and agree to CEC Usage Agreement and Privacy Statement**, and click **Submit**.
6. After the subscription is complete, you can view the order information by choosing **More** > **Billing** > **My Orders**.



Step 6 After the call center is successfully configured, select the instance and click **Customer Engagement Center** to access the Customer Service Cloud system. You can prepare for your first call by referring to **3 Making the First Call**.

----End

3 Making the First Call

Some functions have been preset in the CEC. You can experience a simple manual call business through simple configuration.

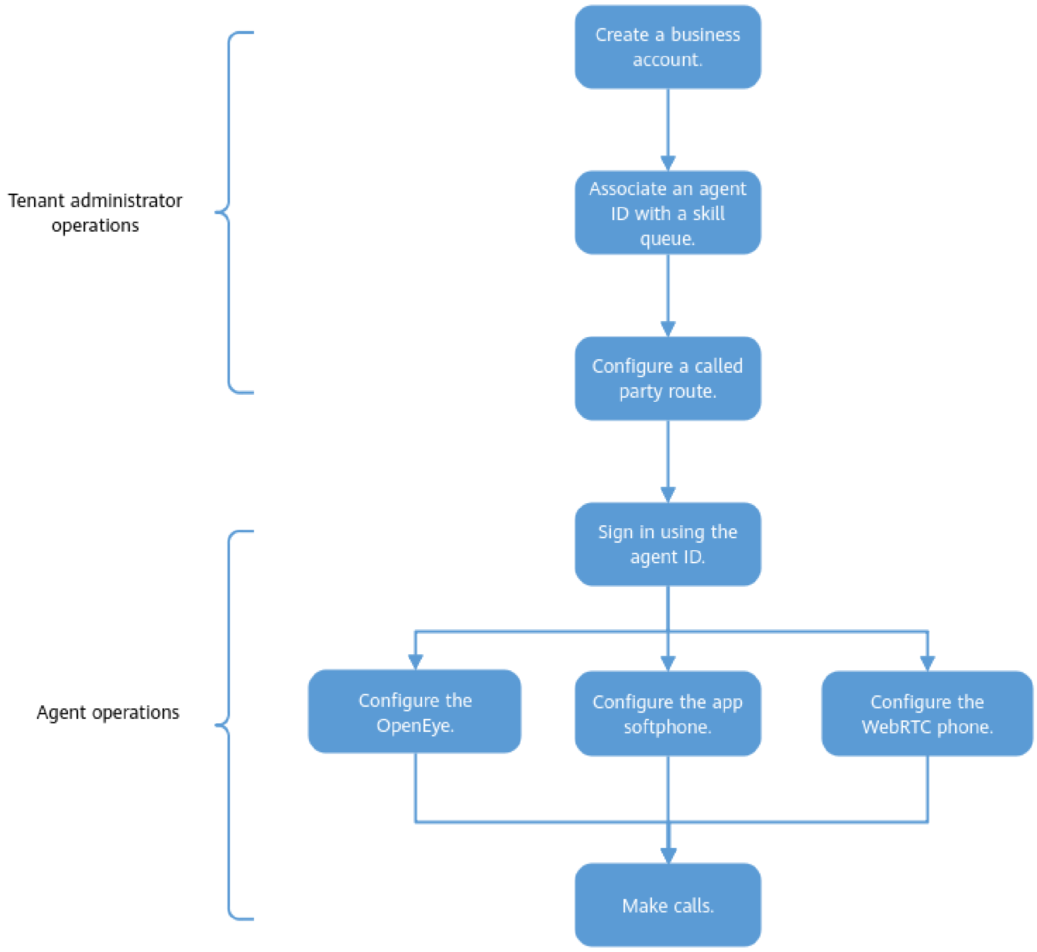
Context

Before making a call, you need to understand and configure the following:

- Agent: Subject who handles call businesses. An agent has a unique agent ID. The agent can sign in to the Customer Service Cloud to handle businesses only after the agent ID is associated with a business account and skill queues.
- Business account: Enterprise employee account. You need to configure basic information, including the name, gender, department, and phone number.
- Skill queue: A group of agents who handle problems of the same type or answer questions of the same type. Agents are classified into the voice, multimedia, video, voice click-to-dial, and video click-to-dial types, which are used to handle different problems.
- Called party route: Routing policy for allocating inbound calls to agents in a specified skill queue.

The following figure shows the process of configuring call businesses.

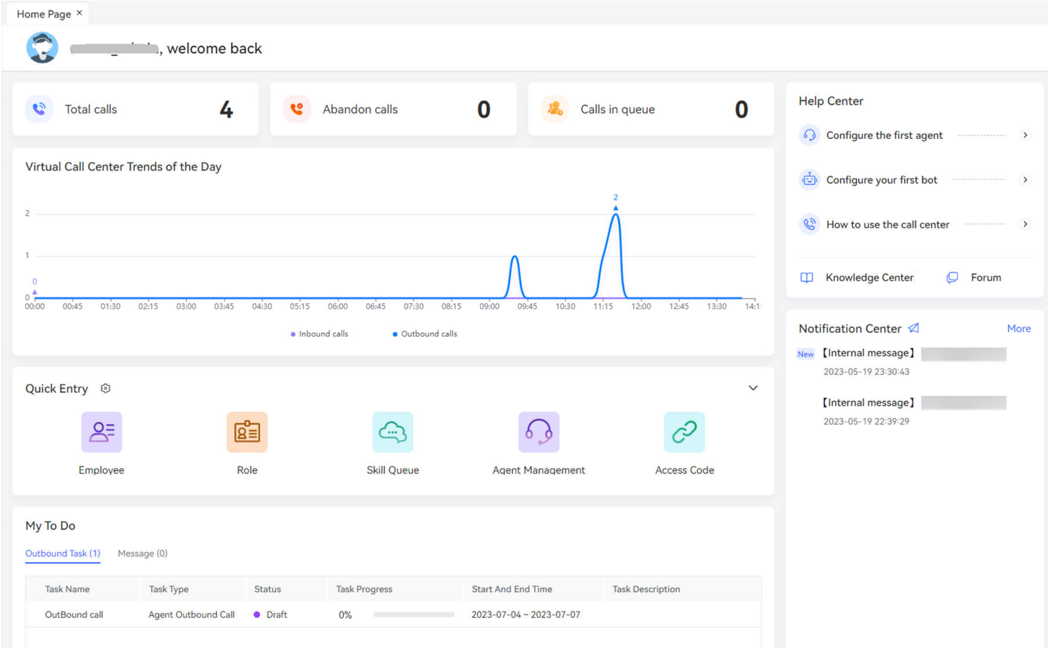
Figure 3-1 Process of configuring call businesses



Procedure

Step 1 Sign in to the Customer Service Cloud home page as a tenant administrator.

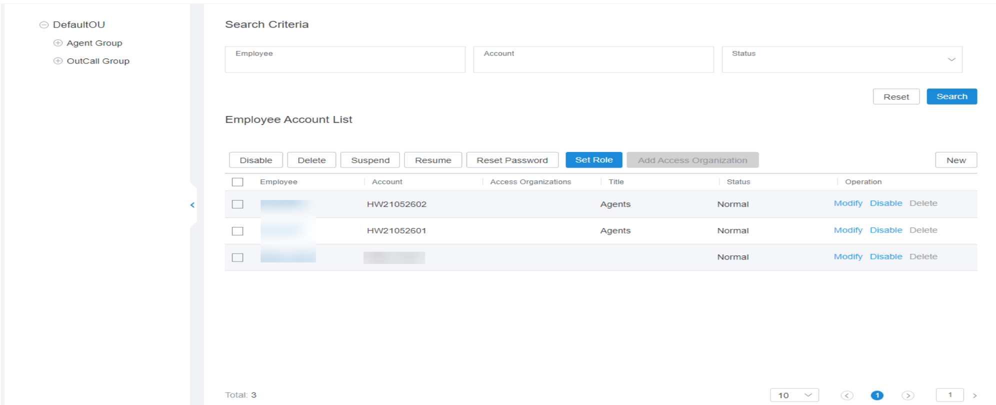
Figure 3-2 CEC home page



Step 2 Create a business account.

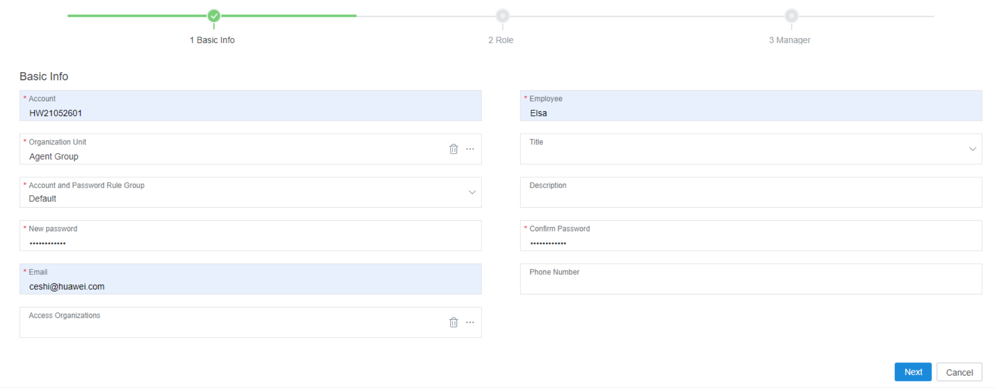
1. Choose **Configuration Center** > **Employee Center** > **Employee**. The employee management page is displayed.
2. Choose **DefaultOU** on the left and click **New** on the right. The **Add Employee** page is displayed.

Figure 3-3 Adding an employee



3. Configure basic employee information, as shown in **Figure 3-4**.

Figure 3-4 Basic Info page



Note the following:

– The account name must be globally unique. If an error message is displayed when you go to the next step using an account name, change the account name. A prefix of the company ID is recommended for uniqueness purposes.

– The new password and confirm password must meet the following complexity requirements:

  ■ The passwords must contain at least eight characters.

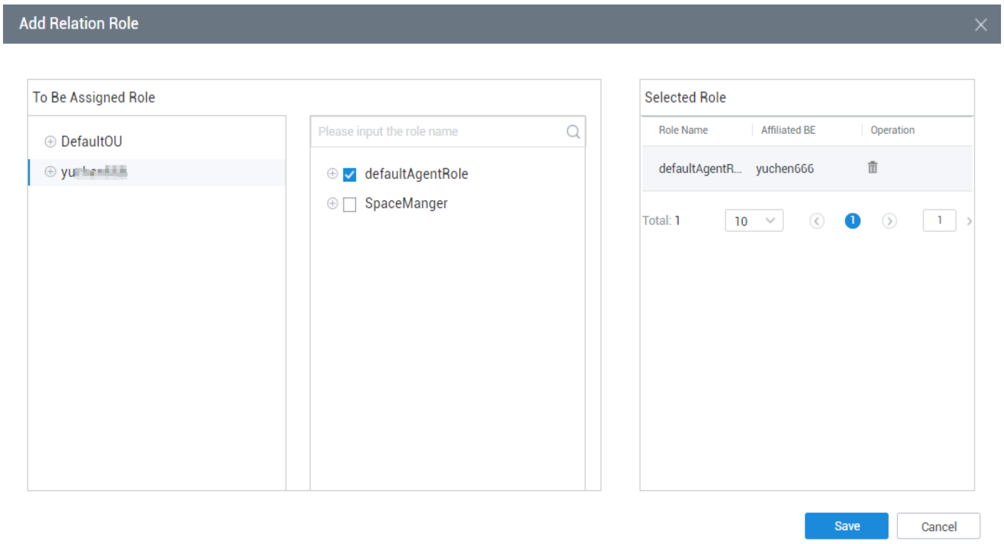
  ■ The passwords must contain at least one uppercase letter, one lowercase letter, one digit, and one special character.

  ■ The passwords cannot be the same as account names or account names in reverse order.

  You can view more password complexity requirements on the **Configuration Center** > **Employee Center** > **Account And Password Rule** page.

4. Click **Next** and configure role information.
5. Click **Add**, configure agent role functions, and click **Save**, as shown in **Figure 3-5**.

Figure 3-5 Adding roles

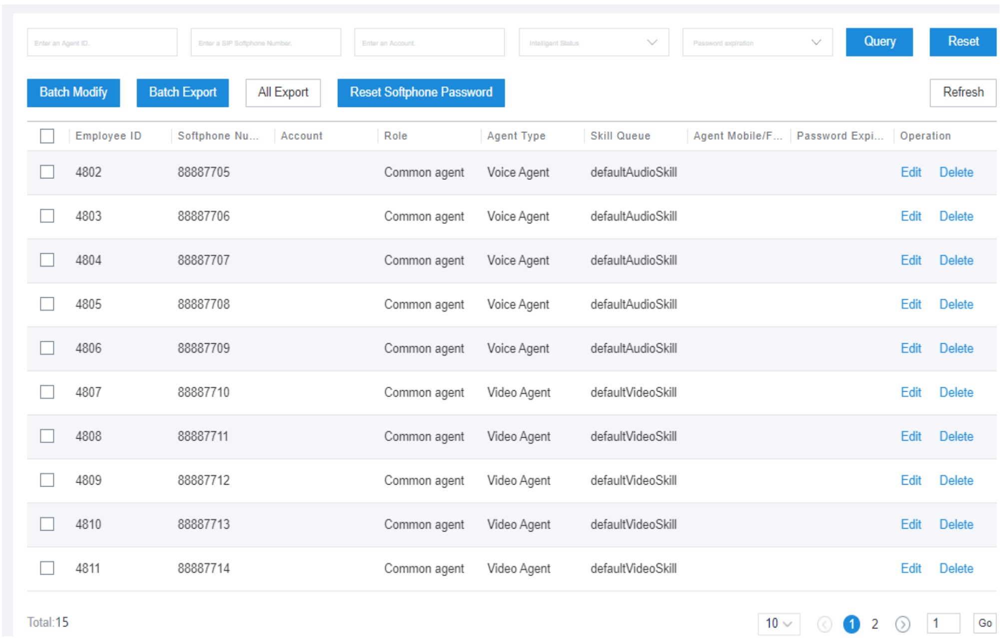


6. Click **Next** and configure manager information.
7. Click **Finish**. You do not need to set the manager.

Step 3 Associate the business account with an agent ID and a skill queue.

1. Choose **Configuration Center** > **Employee Center** > **Agent Management**. The tenant space is in initialized state, and agent IDs are not associated with business accounts.

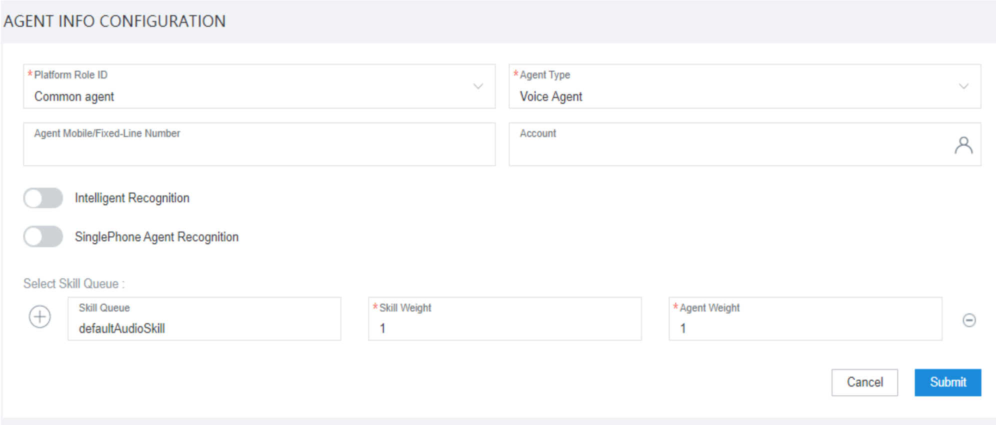
Figure 3-6 Agent Management page



2. Select an agent ID and click **Configure**. The **AGENT INFO CONFIGURATION** page is displayed.

   The tenant space is in initialized state. Agent ID, agent type, and skill queue information has been allocated and associated based on the agent resources applied for the tenant space, as shown in the following figure.

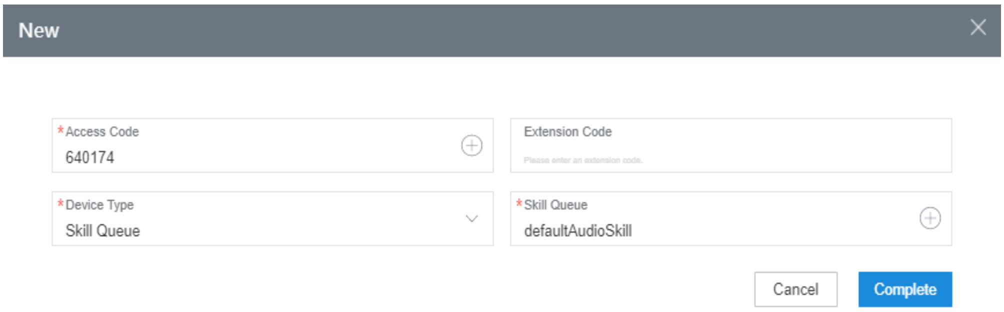
Figure 3-7 Configuring agent information



3. Click corresponding to **Account**, select the business account that you have added in **Step 2**, and click **OK**.
4. Click **Submit** to save the agent configuration.

Step 4 Choose **Configuration Center** > **Access Configuration** > **Called Route**, click **New**, add the target skill queue for the called number, and click **Complete**.

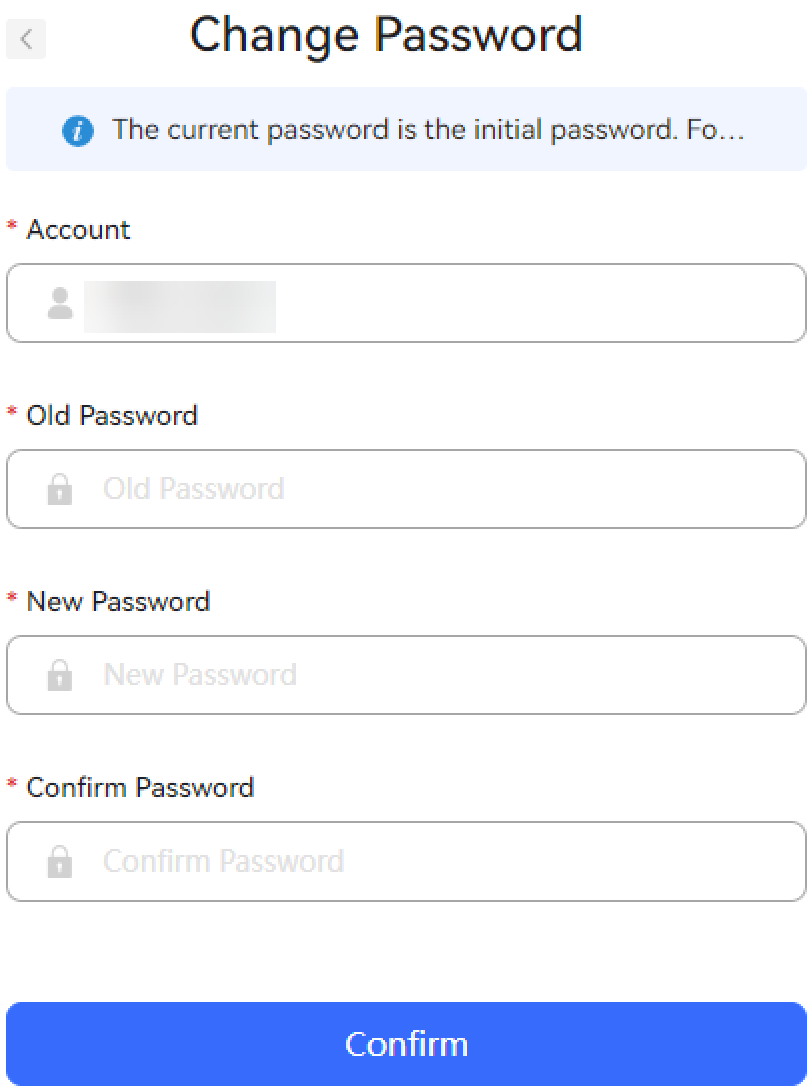
Figure 3-8 Adding a called route



Step 5 Sign in to the Customer Service Cloud as an agent.

1. Enter the account and password created in **Step 2** and click **Sign In**.
2. During the first sign-in, change the password as prompted and click **Confirm**.

Figure 3-9 Changing the password



3. After the password is changed, use the account and new password to sign in to the **CEC**. After the sign-in, you are in the offline state and cannot answer inbound calls.

Step 6 After successful sign-in, make the first call.

You can use the OpenEye, WebRTC, or app to make a call. For details, see **Using the OpenEye to Make a Call**, **Using the WebRTC to Make a Call**, and **Using the App to Make a Call**.

- OpenEye: The OpenEye is a multimedia soft terminal that can work with the Customer Service Cloud to provide call businesses. Download and install the OpenEye, configure the registration server information, and log in to the OpenEye using an agent account.
- WebRTC: The web real-time communication (WebRTC) uses a web browser to transmit texts, files, videos, and voices in real time. The WebRTC feature

supports voice and video calls. Contact the system administrator to enable the WebRTC feature.

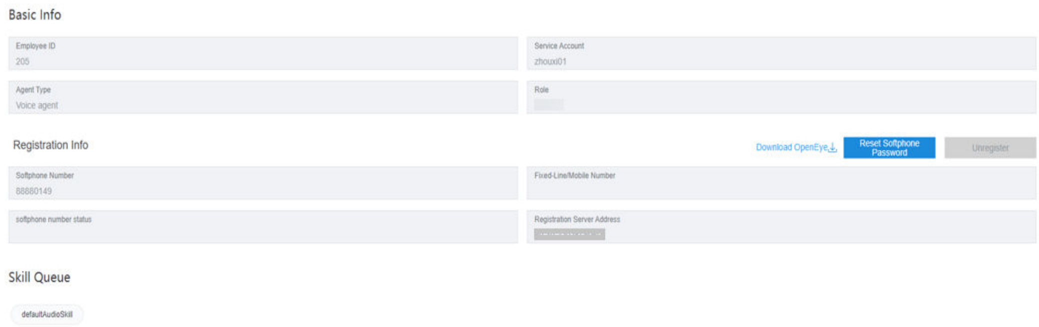
- App: The app is a multimedia terminal application that can work with the CEC to provide call businesses, text chat services, and interconnection with WeChat official accounts and web systems. To download the app, contact operations personnel to obtain the installation package.

----End

Using the OpenEye to Make a Call

Step 1 Choose **Configuration Center** > **System Management** > **Agent Information** to view the softphone number of the current agent and registration server address.

Figure 3-10 Agent Information page



Step 2 Click **Reset Softphone Password**, set the new softphone password, and click **Complete**.

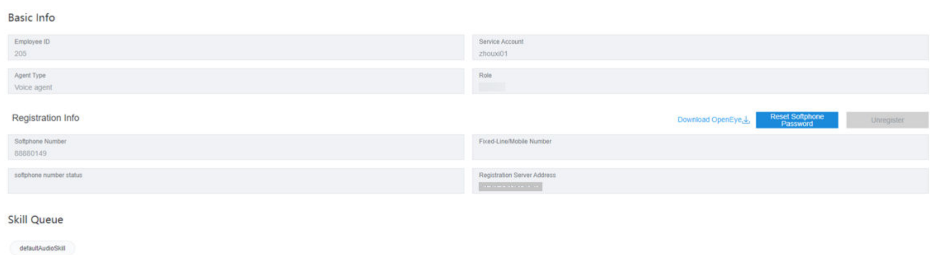
NOTICE

If the password is not reset, the account may be stolen. Therefore, reset the softphone password promptly.

Step 3 Install and configure the OpenEye.

1. Click **Download OpenEye** to download the OpenEye as prompted.

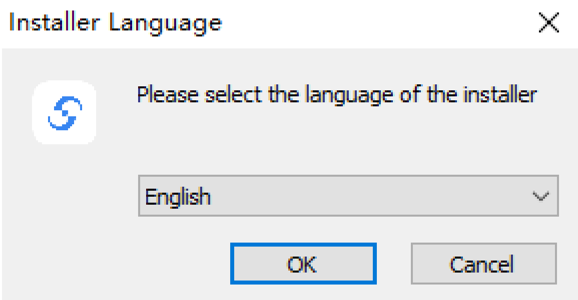
Figure 3-11 Downloading the OpenEye

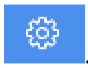


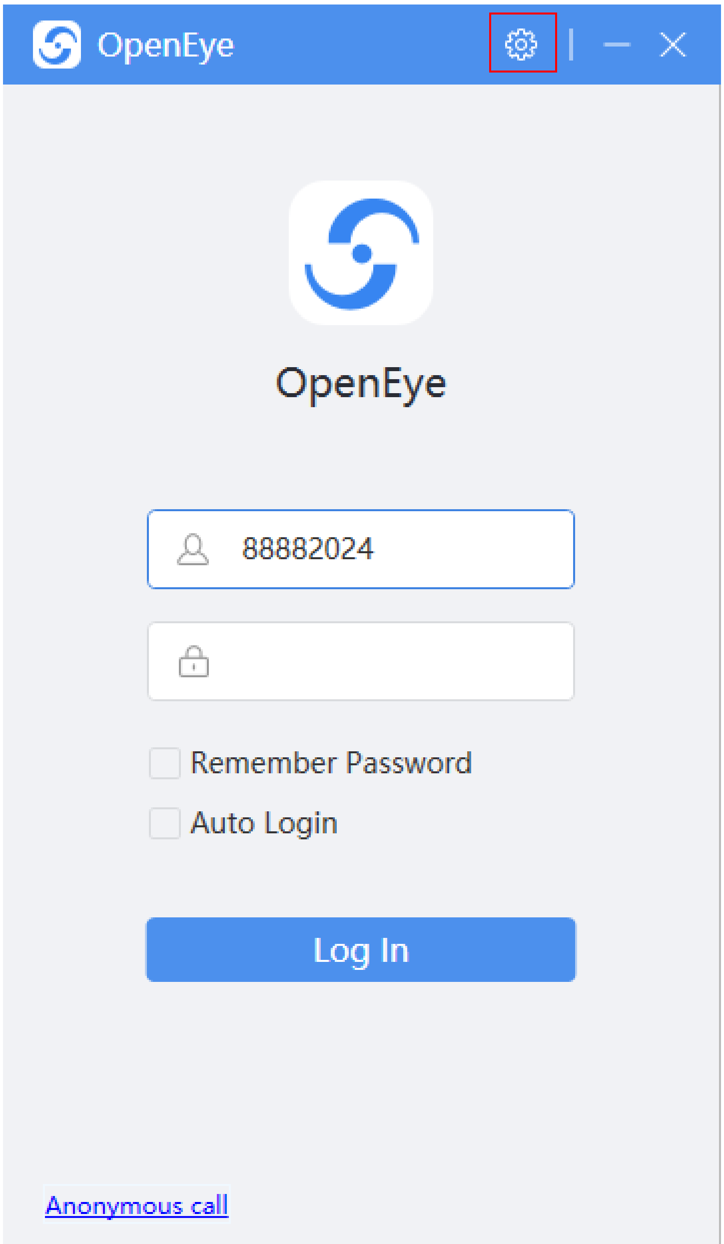
2. Decompress the **openEye.zip** package on the local PC and double-click **OpenEyeSetup.exe** to install the OpenEye.

   Install the softphone software as prompted. Simplified Chinese is recommended.

Figure 3-12 Installation language



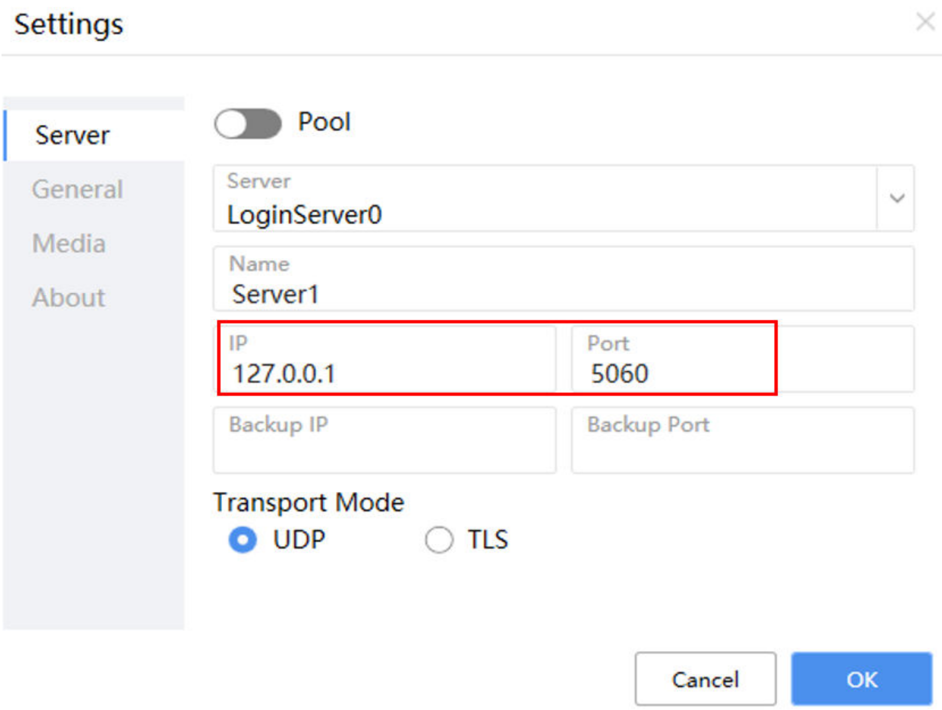
3. After the installation is complete, start the OpenEye. Click . The **Settings** page is displayed.



4. On the **Server** page, configure server information.

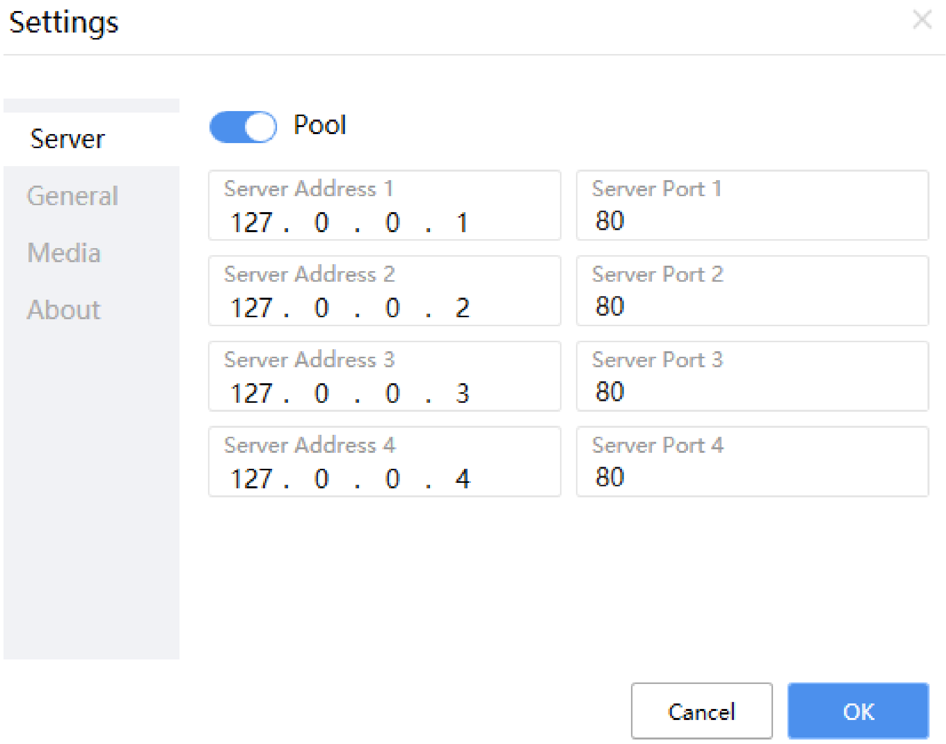
– Single mode: If the call center does not support pool networking, configure server information by referring to Figure 3-13.

Figure 3-13 Single mode

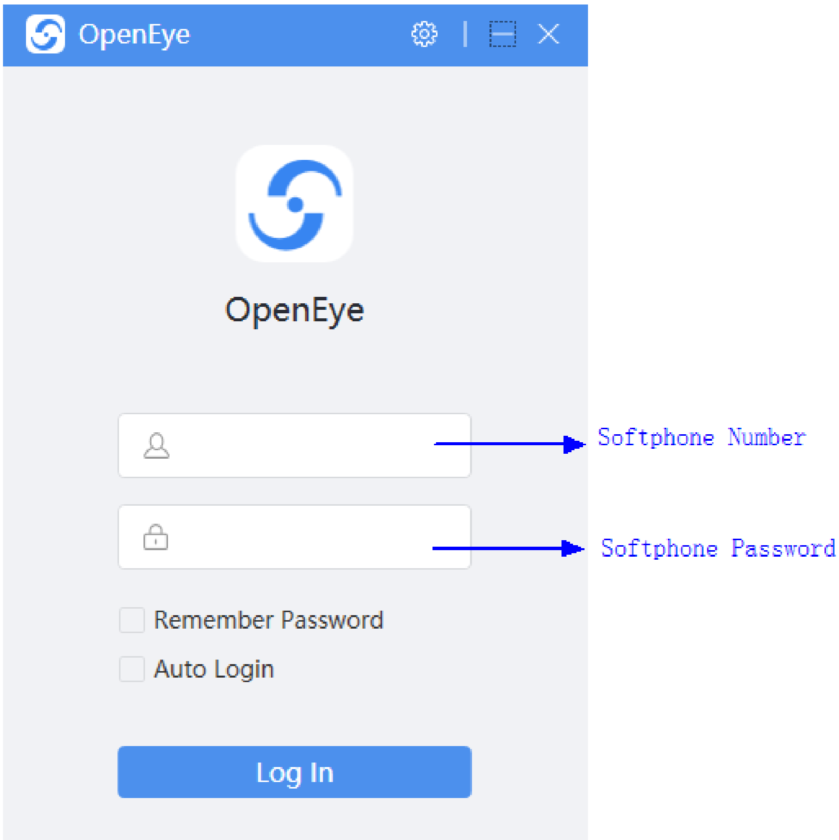


– Pool mode: If the call center support pool networking, configure server information by referring to Figure 3-14.

Figure 3-14 Pool mode



5. Click **OK** to return to the login page. Enter the softphone number and the new password on the agent information page to log in to the OpenEye.



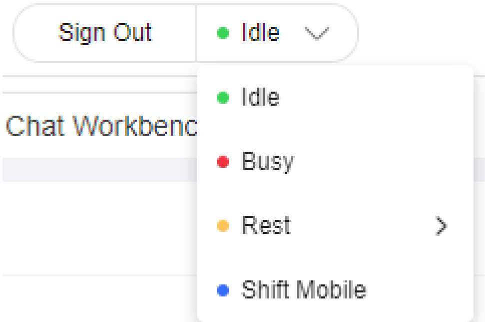
NOTE

Each agent has only one softphone number and can use only this softphone number.

Step 4 Return to the Customer Service Cloud page, click 

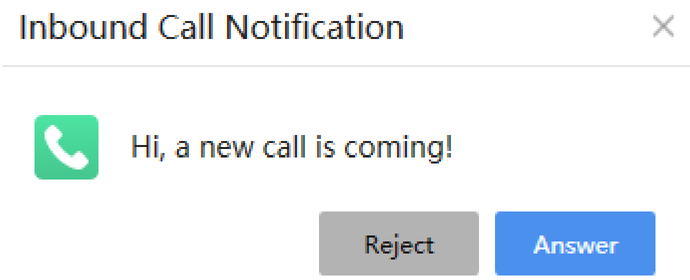
. The agent enters the idle state after sign-in.

Figure 3-15 Agent sign-in



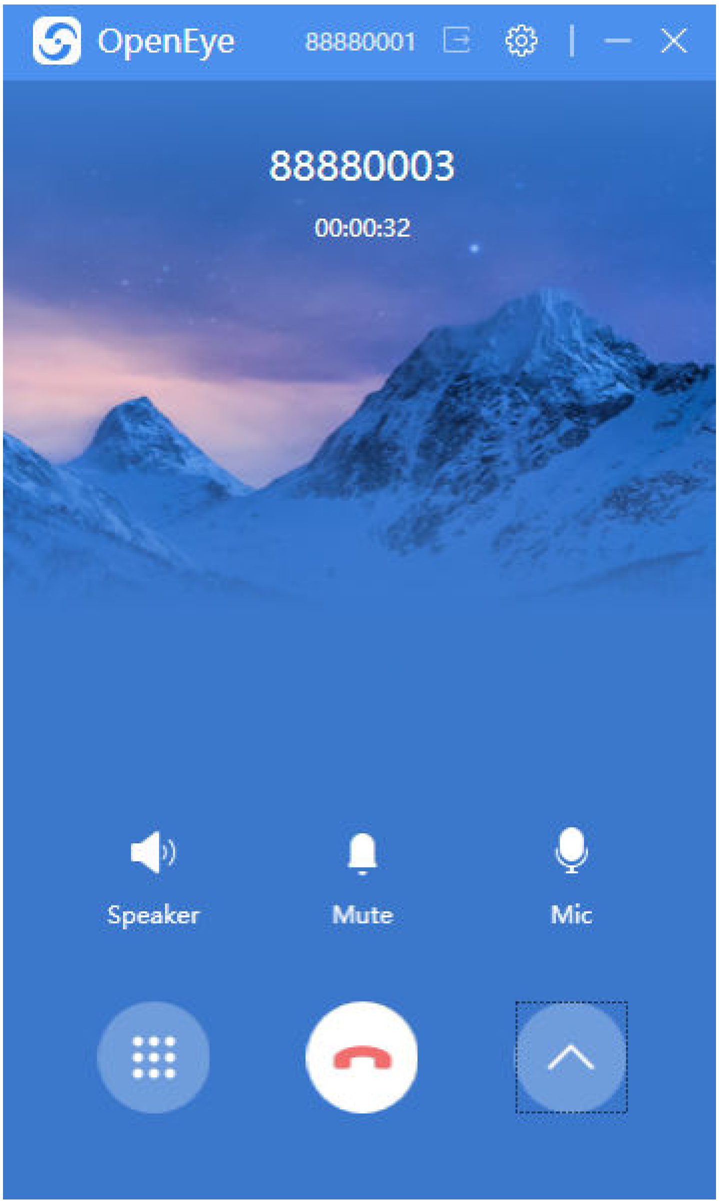
Step 5 When a call comes in, the softphone of the agent rings, and the call is automatically connected. The agent can also click **Answer** before the call is automatically connected.

Figure 3-16 Inbound call notification



NOTE

The agent enters the talking state. The following figure shows the softphone page.



----End

Using the WebRTC to Make a Call

Step 1 Sign in to the AICC as an agent for whom the WebRTC feature is enabled.

NOTE

The agent must meet the following requirements:

- The agent has not been bound to a fixed-line phone or mobile phone.
- The agent has been bound to voice-related skill queues (including voice, video, voice click-to-dial, and video click-to-dial skill queues).

Step 2 On the connection bar, click , enter the softphone password, click **Register**, and click **Sign In**.

NOTE

- When you sign out, the two phones sign out at the same time.
- After you sign out, the softphone status changes to unregistered.
- If the unified softphone number authentication feature is enabled for the tenant and the agent authentication mode is set to unified authentication, you can click **Sign In** without entering the password. The softphone is automatically registered.
- In pool mode, there are two phones that share the same password. If the registration is successful, the status of the two phones is registered. If either of them fails, you can click the phone to register again.

Step 3 Initiate a voice call.

1. Click , enter a softphone number, and make a call. The call can be a voice call.

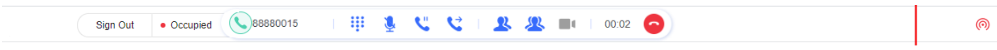
   NOTE

   – A WebRTC phone can make outbound calls only when it is registered and the agent has signed in.

   – When you dial the number for the first time, the message "xxx.xxx.xxx.xxx wants to use your microphone" is displayed. Click **Allow**.

2. Click **Answer** to answer a ringing call as an agent. The customer's phone then rings and waits for the customer to answer the call.

   The WebRTC phone is in talking state and displayed in red, and the agent is in occupied state.



Step 4 Initiate a video call.

1. Click , enter a softphone number, and make a call. The call can be a video call.

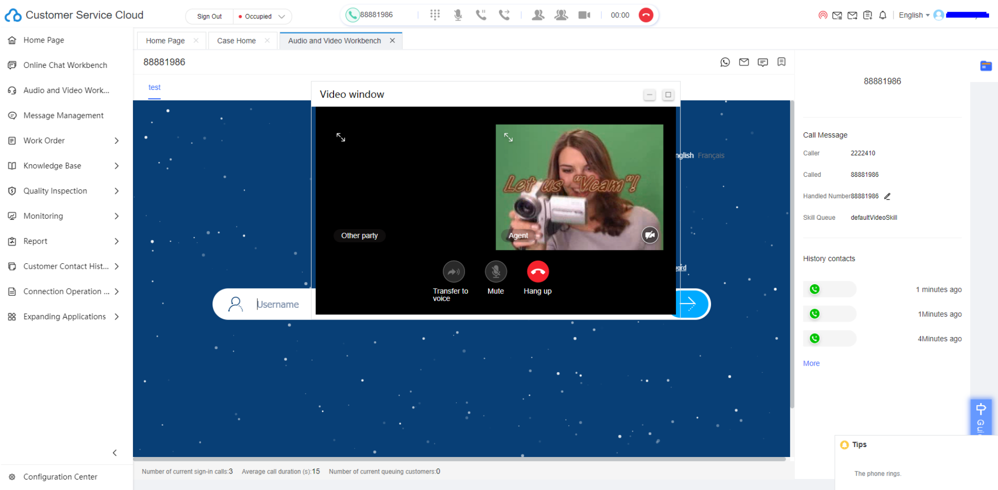
   NOTE

   – A WebRTC phone can make outbound calls only when it is registered and the agent has signed in.

   – When you dial the number for the first time, the message "xxx.xxx.xxx.xxx wants to use your microphone" is displayed. Click **Allow**.

2. Click **Answer** to answer a ringing call as an agent. The customer's phone then rings and waits for the customer to answer the call.

   The WebRTC phone is in talking state and displayed in red, and the agent is in occupied state. The following figure shows a video call.



Only the local video window is displayed.

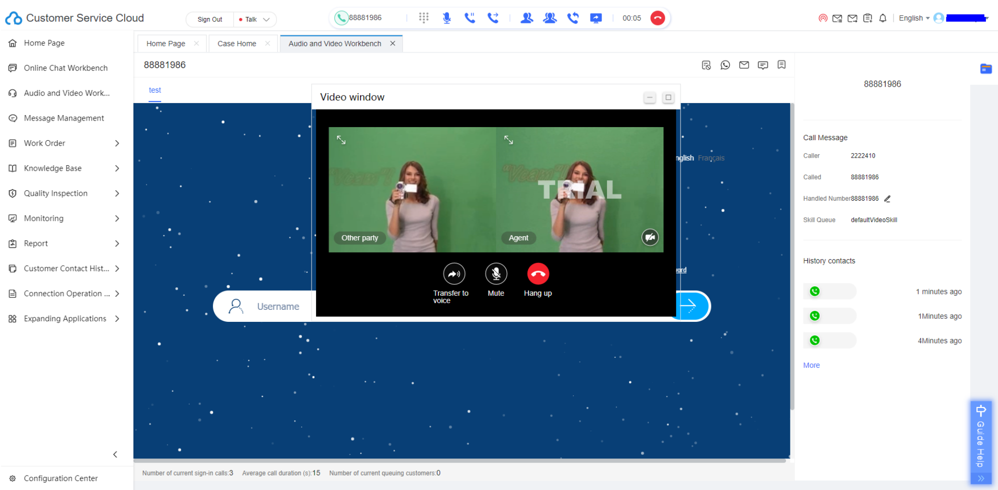
Click the desktop sharing on the connection bar to share a specified area, including:

- Entire screen
- Application window
- Browser tab page

NOTE

- In pool mode, either of the two phones is used randomly.
- Pay attention to personal privacy protection during desktop sharing.

3. (Optional) After the video call is connected, check that the following page is displayed.



: Click to stop sending the video.

: Click to zoom in the window.

: Click to hide the video window and display the call duration (

).

: Click to display the fullscreen video window.

: Click to switch to a voice call or resume a video call. Click the button for switching between voice and video calls on the connection bar and select a video call.

: Click to mute yourself and click again to unmute yourself.

: Click to hang up the current call.

Step 5 Answer a call from a user.

1. When a user dials the access code of a skill queue, the agent waits for about two seconds and automatically answers the call.
2. When a user dials the access code of an IVR device and the call is transferred to an agent, the agent automatically answers the call 2 seconds after the user hears the announcement.

NOTE

In pool mode, an agent talks with a phone randomly. The agent enters the busy state and does not answer other calls.

If a user directly makes a call to an idle phone, the call is directly disconnected.

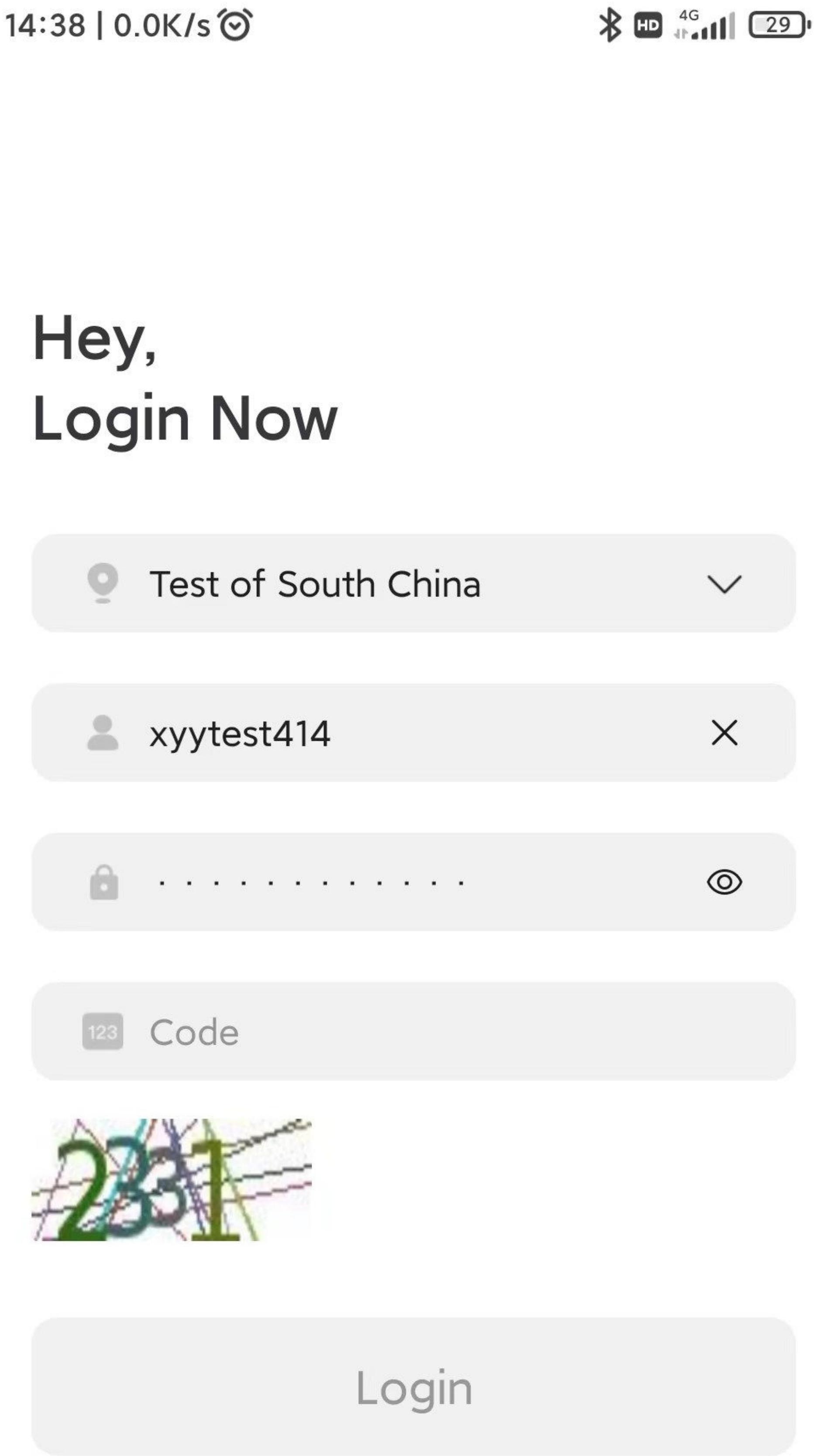
----End

Using the App to Make a Call

Step 1 Download the app. Contact operations personnel to obtain the installation package and install the app on your mobile phone.

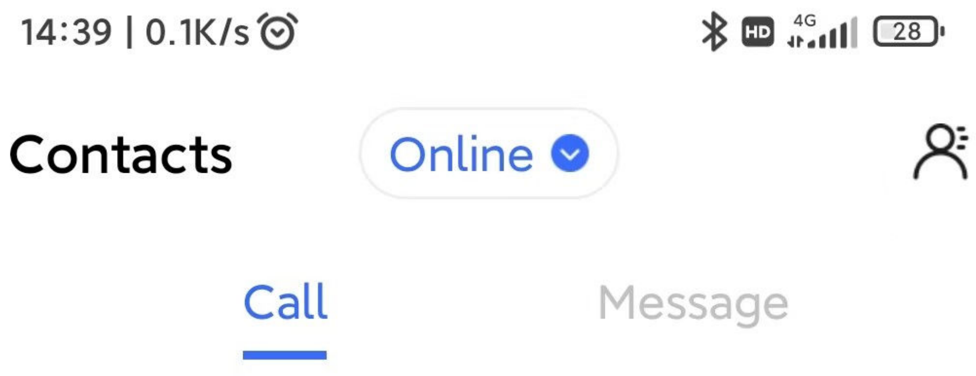
Step 2 Log in to the app. The app login account corresponds to the agent login account.

Figure 3-17 Logging in to the app



Step 3 Sign in as an agent. Set the status on the top of the screen to **Online**.

Figure 3-18 Signing in as an agent



Step 4 On the **Contacts** page, dial a number on the dialer to make a call.

----End

4 Greeting the Chatbot

NOTICE

- The OIAP can be deployed independently or used on the public cloud. Therefore, the navigation paths vary depending on the environment.
- In this document, all the navigation paths are those selected when the OIAP is deployed independently. In the CEC public cloud scenario, you can choose **Configuration Center** > **Flow Configuration** > **Intelligent IVR** to access the OIAP.
- To use the chatbot (intelligent IVR) on the public cloud, ensure that you have subscribed to intelligent IVR, TTS, and ASR resources for the tenant space.

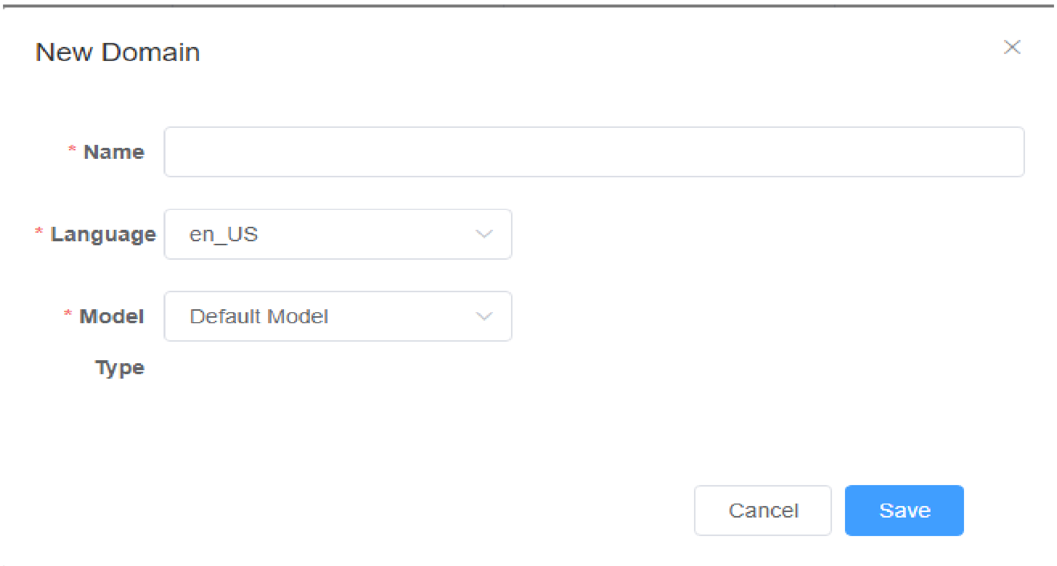
  To check whether the resources have been subscribed to, perform the following steps:

  Log in to the Huawei Cloud console and choose **Service List** > **Business Applications** > **Cognitive Engagement Center**. On the CEC console, choose **Instance Management**. On the page that is displayed, click **Details** corresponding to the desired call center instance to check whether intelligent IVR resources have been subscribed to on the **IVR** tab page and whether TTS and ASR resources have been subscribed to on the **TTS&ASR** tab page.

You can configure your dedicated chatbot online using a flowchart. To help you understand the entire configuration process, this section describes the configuration of a chatbot who replies with "Hello" to your greeting.

Procedure

Step 1 Choose **Knowledge Management** > **Domain Management**, click **Create**, set **Name**, and click **Save**.



Step 2 Click the new domain chatbot. The **Intention Management** page is displayed.

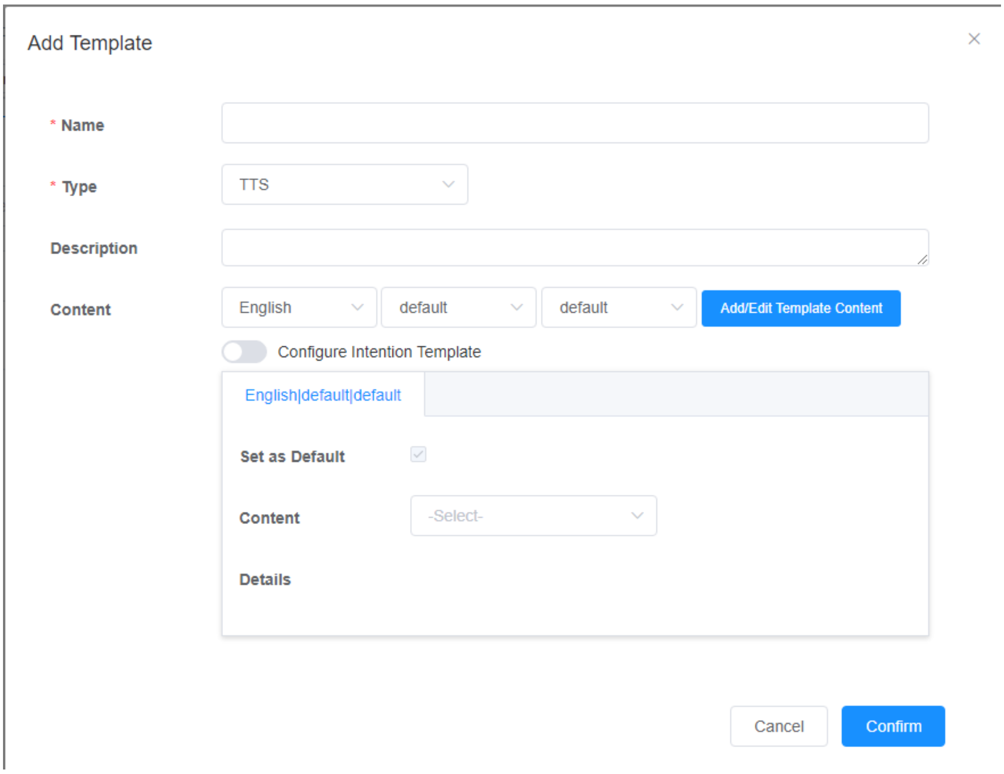
Step 3 Click **Create**, choose **General intent**, enter an intention name, configure **Corpus** and **Response**, and click **Save**.

Step 4 Click **Train**.

Step 5 Choose **Knowledge Management** > **Domain Management** and click **Active** to enable the domain chatbot.

Step 6 Choose **Resource Management** > **Resource Template**. In the integration environment, after the template type is set to **TTS**, the template content is selected from a drop-down list. You need to choose **Configuration Center** > **Resource Management** > **Audio and Video Resource Management**, add a TTS text, and submit the text for approval. After the system administrator approves the text, you can select the text from the drop-down list.

Figure 4-1 Adding a resource template

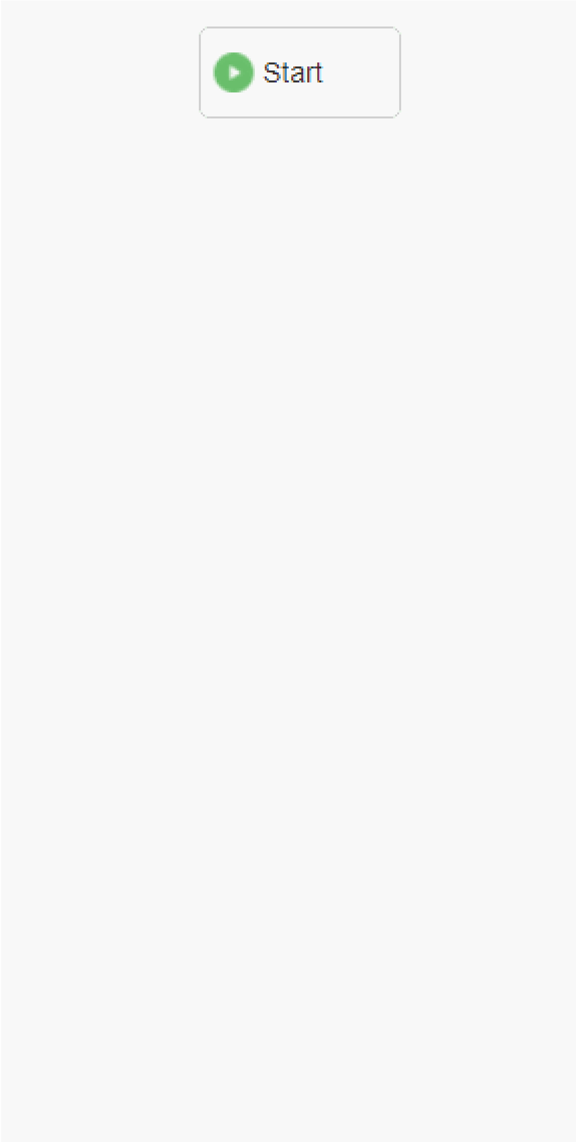


Step 7 Choose **Flow Management** > **Flow Orchestration**, click **Add** in the upper part, and configure a chatbot script flow.

The script flow is as follows: After a call is connected, the user hears "Hello" from the chatbot, then the user says "Hello", and finally the chatbot replies with "Hello" again.

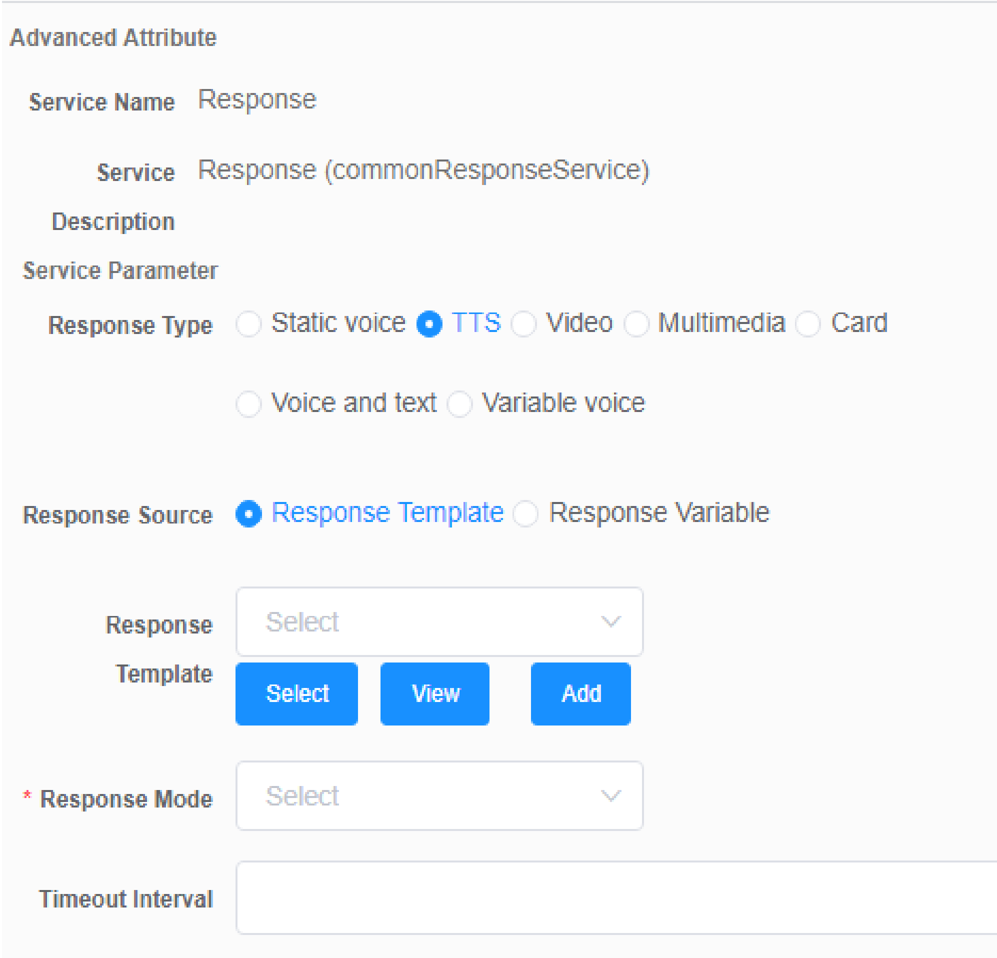
1. Select **Blank Flow**.
2. Drag diagram elements on the left to the canvas and connect them with lines.

Figure 4-2 Dragging diagram elements



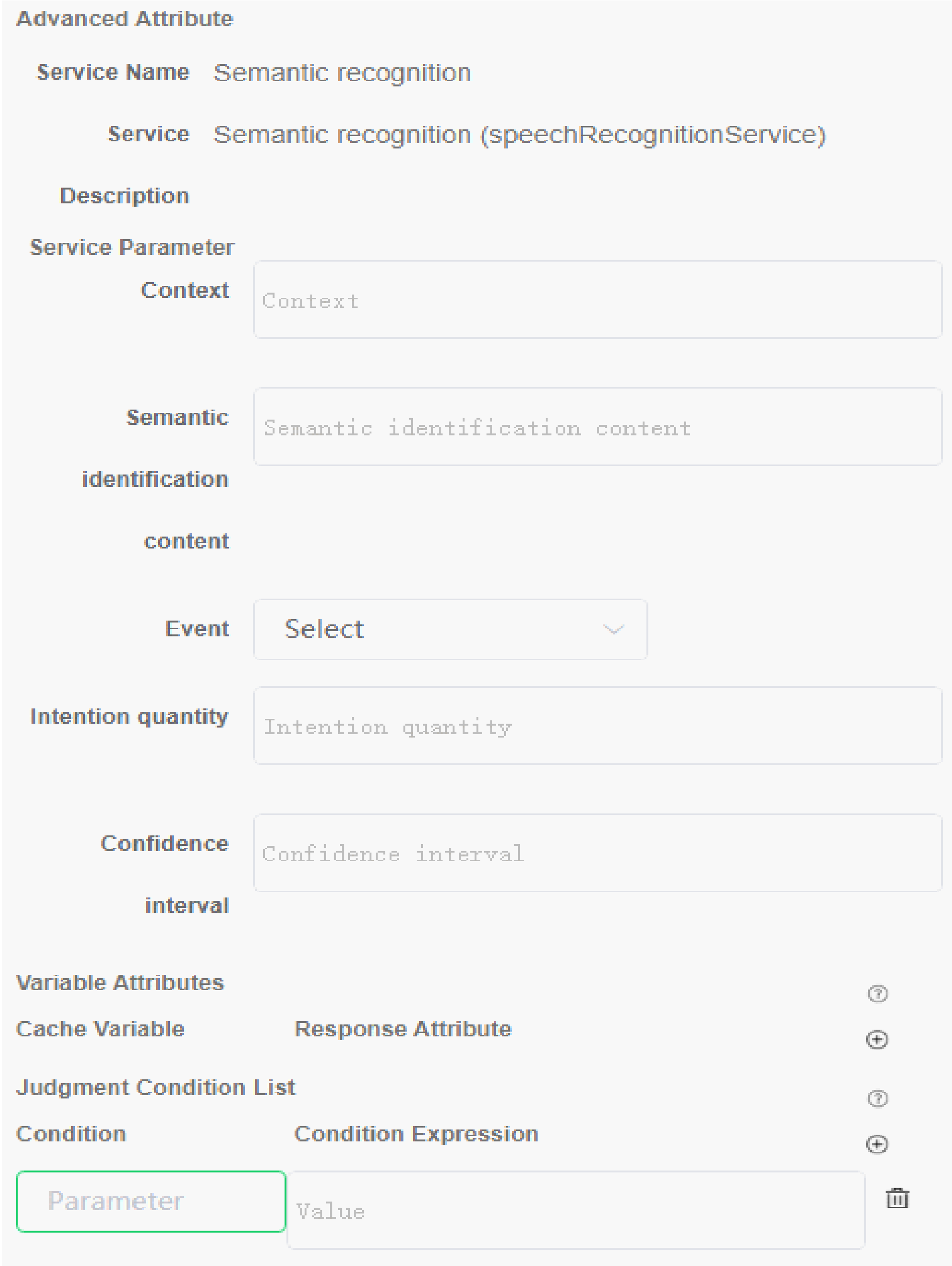
3. Click the **Response** diagram element and set **Response Template**.

Figure 4-3 Setting Response Template



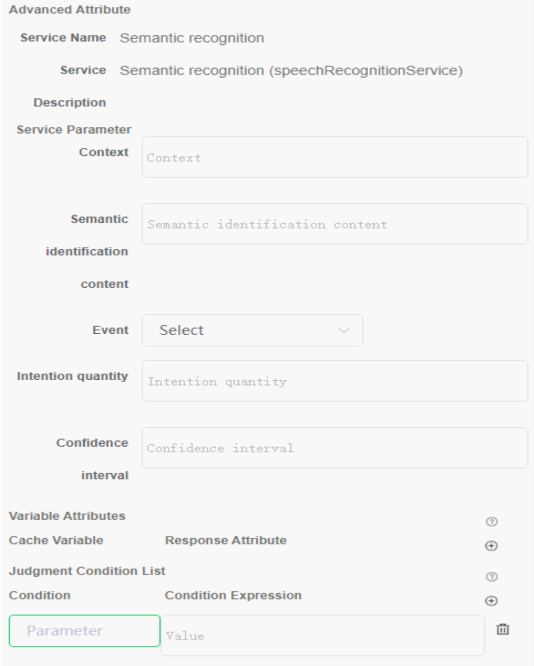
4. Click the **Semantic recognition** diagram element and set the recognition condition to **TOC.ChatBotIntentCode=="CMDHELLO"**.

Figure 4-4 Setting the Semantic recognition diagram element



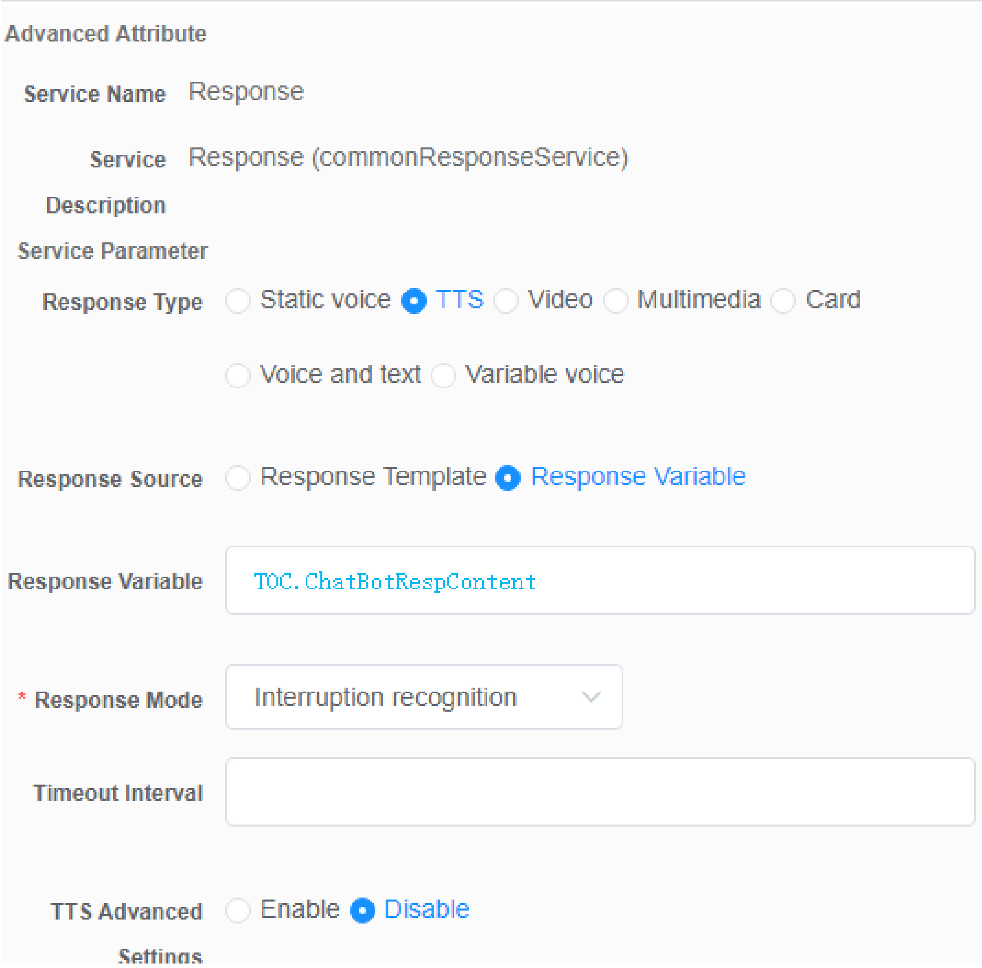
5. Click the line between the **Semantic recognition** diagram element and the last **Response** diagram element, and select a branch condition.

Figure 4-5 Setting a branch



6. Click the last **Response** diagram element and set **Response Variable** to **TOC.ChatBotRespContent**.

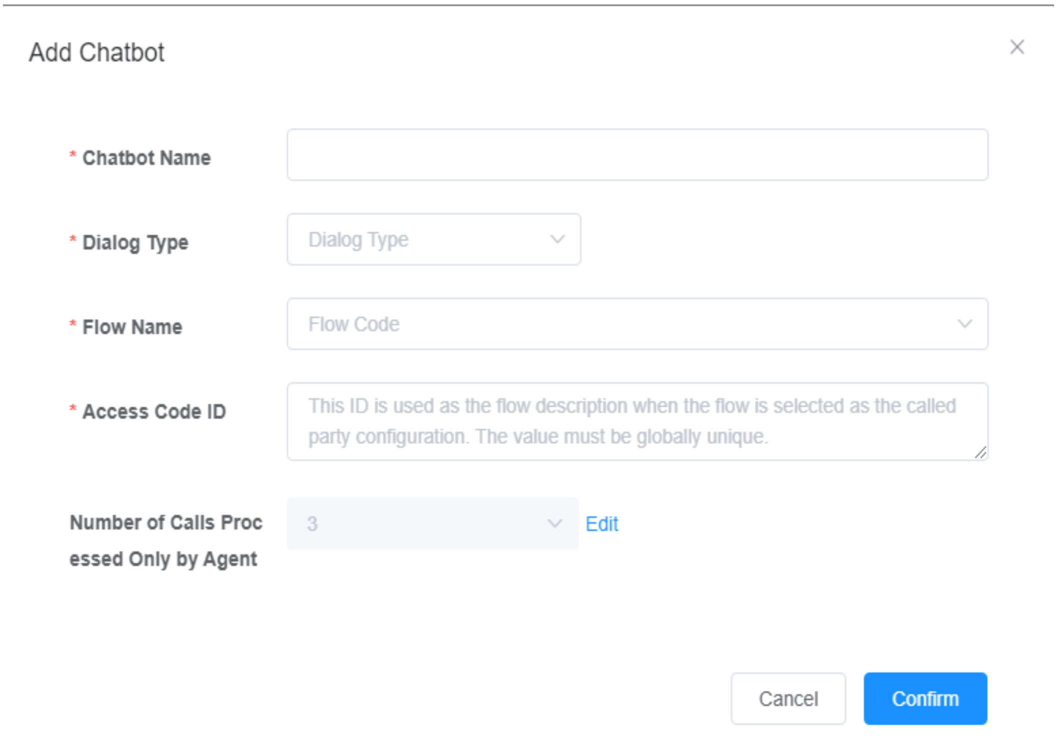
Figure 4-6 Setting Response Variable



7. Click  in the upper part of the canvas.

8. Click  in the upper part of the canvas. On the page that is displayed, click **Confirm**.

Step 8 Choose **Chatbot Management**, and click **Add** to associate an access code with the new flow.



Step 9 Click **Test Call** corresponding to the flow and enter **Hello**. The chatbot replies with "Hello".

----End

Summary

What is the general process for configuring a chatbot?

1. Add a voice or video resource template.
2. Configure the intention to be recognized.
3. Orchestrate a script flow and release it.
4. Configure the chatbot and associate it with the corresponding script flow.