

Game Multimedia Engine

Product Feature Demo

Product Documentation



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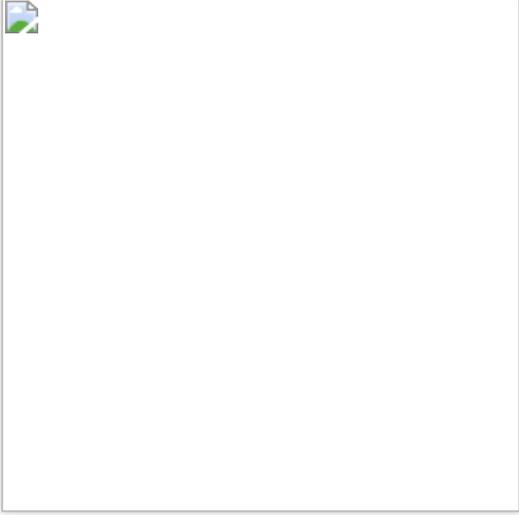
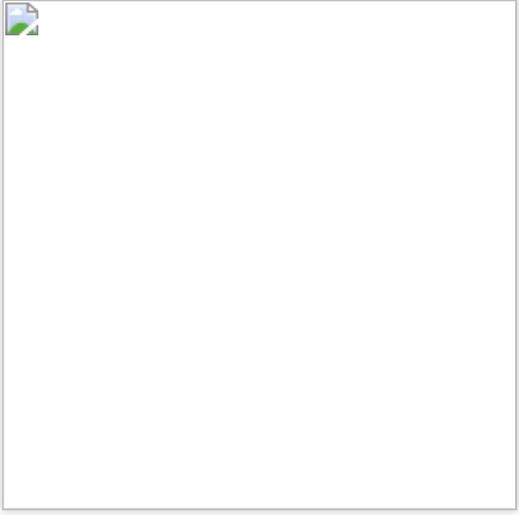
Basic Feature Demo

Last updated : 2023-04-21 14:44:40

Tencent Cloud Game Multimedia Engine (GME) is a one-stop voice solution for the gaming industry, featuring top-of-the-line audio quality and supporting a variety of use cases. GME provides various features such as group voice chat, 3D positional voice chat, voice messaging, speech-to-text conversion.

Note

The demo in this document can run on Android or iOS mobile phones only.

For Android, scan the QR code below	For iOS, scan the QR code below
	

Demo Features

The demo demonstrates the following basic GME features:

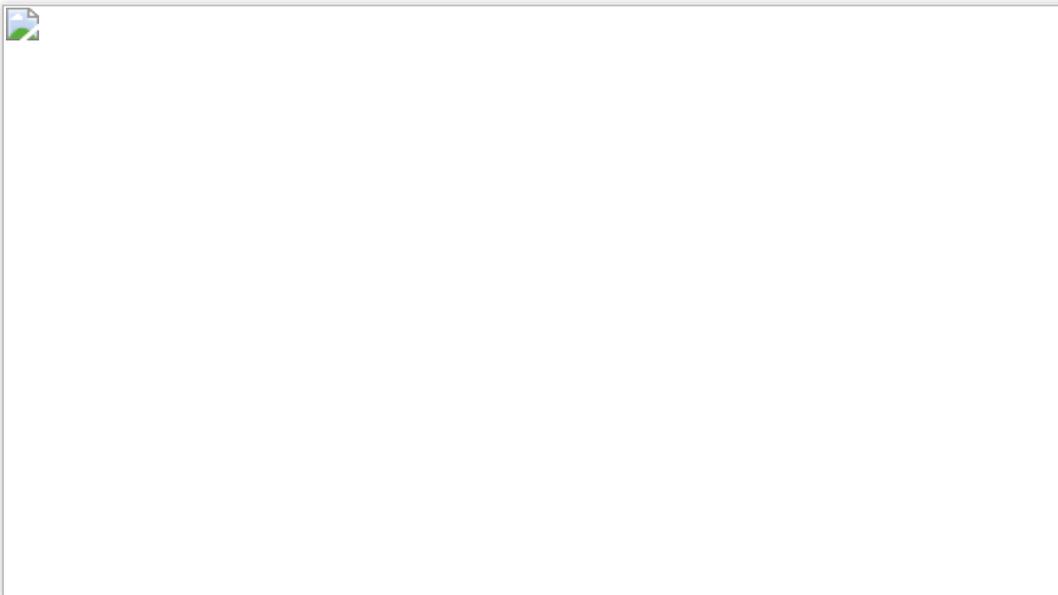
Basic Feature	Subfeature
Voice chat	Sound quality options: Smooth, standard, and HD sound quality
	Voice chat room
	3D sound effect

	Voice changing effect for voice chat (basic voice changing)
Voice messaging	Audio recording by pressing the button, voice message upload, and voice message playback by clicking the button
Speech-to-text conversion	Voice messages uploaded in the demo can be converted to text in various languages automatically.

Login Page

1. Log in to the system

Enter your UserID and click **Login**. Once you are logged in, you will see two new buttons **Voice Chat** and **Voice Message** on the screen.



2. Select a feature

Click **Voice Chat** to start a [voice chat](#).

Click **Voice Message** to send a [voice message](#).

Trying out the Voice Chat Feature

1. Enter a voice chat room

After [login](#), click **Voice Chat** to enter the voice chat page.



RoomId: Room ID. Users with the same room ID will enter the same room.

RoomType: Sound quality.

Fluency: Smooth sound quality with an ultra low latency, which is suitable for group chat in games like FPS and MOBA games.

Standard: Good sound quality with a moderate latency, which is suitable for voice chat in casual games such as Werewolves and board games.

High Quality: HD sound quality with a relative high latency, which is suitable for gaming scenarios demanding high sound quality such as music playback.

2. Perform voice chat operations

On the voice chat page, click **JoinRoom** to enter a room:



Talking Members: IDs of the members speaking in the room.

Mic: If it is selected, the mic is enabled.

Speaker: If it is selected, the speaker is enabled.

3D Voice Effect: If it is selected, the 3D sound effect is enabled. You can configure this feature by setting the following parameters:

Range: Distance range for receiving audio in the distance unit of your game engine.

X: The audio position along the X axis.

Y: The audio position along the Y axis.

Z: The audio position along the Z axis.

XR: The degrees by which the audio rotates around the X axis.

YR: The degrees by which the audio rotates around the Y axis.

ZR: The degrees by which the audio rotates around the Z axis.

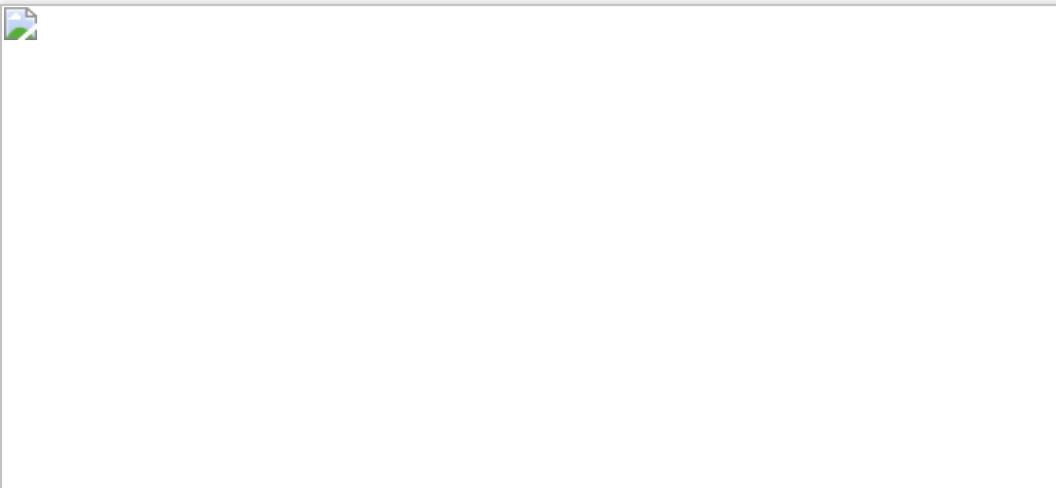
Voice Change: Sound effect for voice chat. You can select different effects. For more information, see [Real-time Sound Effect](#).

QuitRoom: You can click it to exit the voice chat room and return to the previous page.

Trying out the Voice Message and Speech-to-Text Conversion Features

1. Enter the voice messaging feature UI

After [login](#), click **Voice Message** to enter the voice messaging page:



2. Perform operations on the page

Language: Select the language of the recorded speech. After recording, the speech will be converted into text in the specified language and displayed after **Audio-to-Text**.

Push To Talk: Press and hold **Push To Talk** to start recording and release it to stop recording.

Audio: Recorded voice message and its duration. Click



to play back the recording, and click it again to stop the playback.

Audio-to-Text: Output text.

Scenario-Specific Demo

Last updated : 2023-04-27 17:06:31

Tencent Cloud Game Multimedia Engine (GME) is a one-stop voice solution for the gaming industry, featuring top-of-the-line audio quality and supporting a variety of use cases. GME provides various features such as group voice chat, 3D positional voice chat, voice messaging, and speech-to-text conversion.

This demo simulates a simple game scenario and showcases the features of GME, including voice chat, 3D voice, range voice, voice changing, and howling suppression.

Directions

Step 1. Download the demo

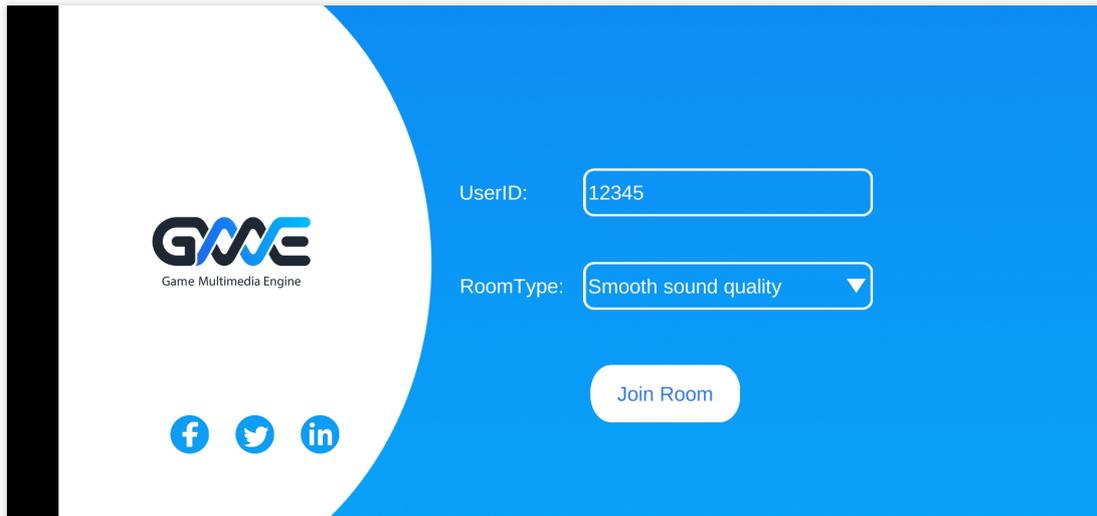
For Android or iOS, scan the QR code below	Windows
 A square QR code with a white background and a black border. In the center of the QR code is a circular logo for GME (Game Multimedia Engine) with the text 'GME' in blue and 'Game Multimedia Engine' in smaller black text below it.	Download

Step 2. Install the demo

Decompress the downloaded package and open the software named **GMEDemo**.

Step 3. Enter a voice chat room

Open the demo and select a voice chat room to enter.



UserID: It is automatically generated in the demo and can be set as needed. It must be unique.

RoomType: Choose the sound quality of the room. Players who select the same RoomType option will enter the same room. The options are as follows:

Smooth sound quality

Standard sound quality

High sound quality (HD)

Click **JoinRoom** to enter the voice chat room.

Step 4. Main UI of the game

You will see the main UI of the game upon entering the voice chat room.



Instructions:

Back button: Click the arrow in the upper left corner to return to the page for selecting a voice chat room.

Microphone button: By default, the microphone is on when you enter the room. At this point, you can speak in the room.

Speaker button: By default, the speaker is on when you enter the room. At this point, you can hear other members in the room.

Settings button: Click the button to set the language, and enable or disable the following features: 3D voice, range voice, voice changing, and howling suppression.

Help button: Click the button to read the game guide.

Bottom left corner of the interface: The virtual joystick used to control the movement of the character.

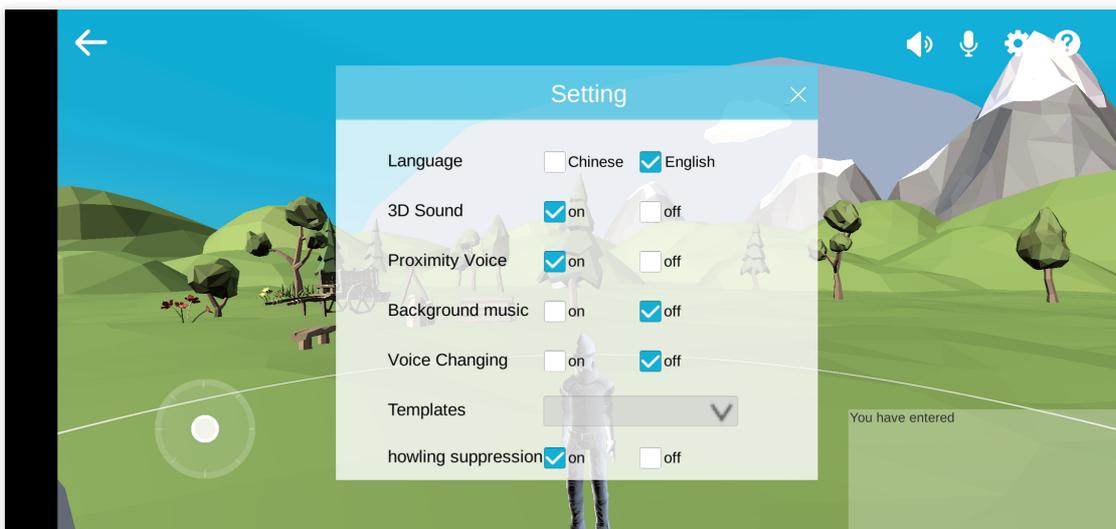
Bottom right corner of the interface: Room logs showing users who entered and exited the voice chat room.

Information for determining whether the connection succeeds:

1. The game character of the other player can be seen on the game UI.
2. The logs in the bottom right corner of the UI display the room entry records of the other player's game character, indicated by their `userID`.

Step 5. Settings page of the game

Click the settings button to go to the game settings page.



Language: Select Chinese or English.

3D Sound: After enabling the 3D voice feature, you can experience stereo sound effects and the volume change as a speaking character moves. For more information, see [3D Sound Effect](#).

Proximity Voice: It is also called range voice. After enabling this feature, a circle is displayed around your character. You can communicate only with players whose characters are also within this circle. When this feature is disabled, communication is not affected by the range. For more information, see [Range Voice](#).

Background Music: After this feature is enabled, the background music will be played back.

Voice Changing: After enabling this feature, you can change your voice to the selected tone. For details, see [Voice Changing](#).

Templates: You can select your preferred voice changing template from the drop-down list.

Howling Suppression: After this feature is enabled, howling generated in the call will be suppressed.

Step 6. Operations

1. You can turn on the microphone and speaker by clicking corresponding buttons to chat with other players in a room.
2. You can go to the settings page to enable or disable the following features: 3D voice, range voice, and voice changing.
3. On mobile devices, you can use the virtual joystick to control the movement of your character, and adjust the view by moving your finger on the screen. On Windows PCs, you can press the "W", "S", "A", and "D" keys to move forward, backward, left, and right respectively, and adjust the view by moving your mouse.
4. Assume that there are two players, namely player A and player B, in the game. Player A can experience the 3D voice effect when player B moves around player A and keeps speaking in this process. When player B moves to a position beyond the range set for the 3D voice effect, player A can hardly hear player B.