

Low-code Interactive Classroom

Service Callbacks

Product Documentation



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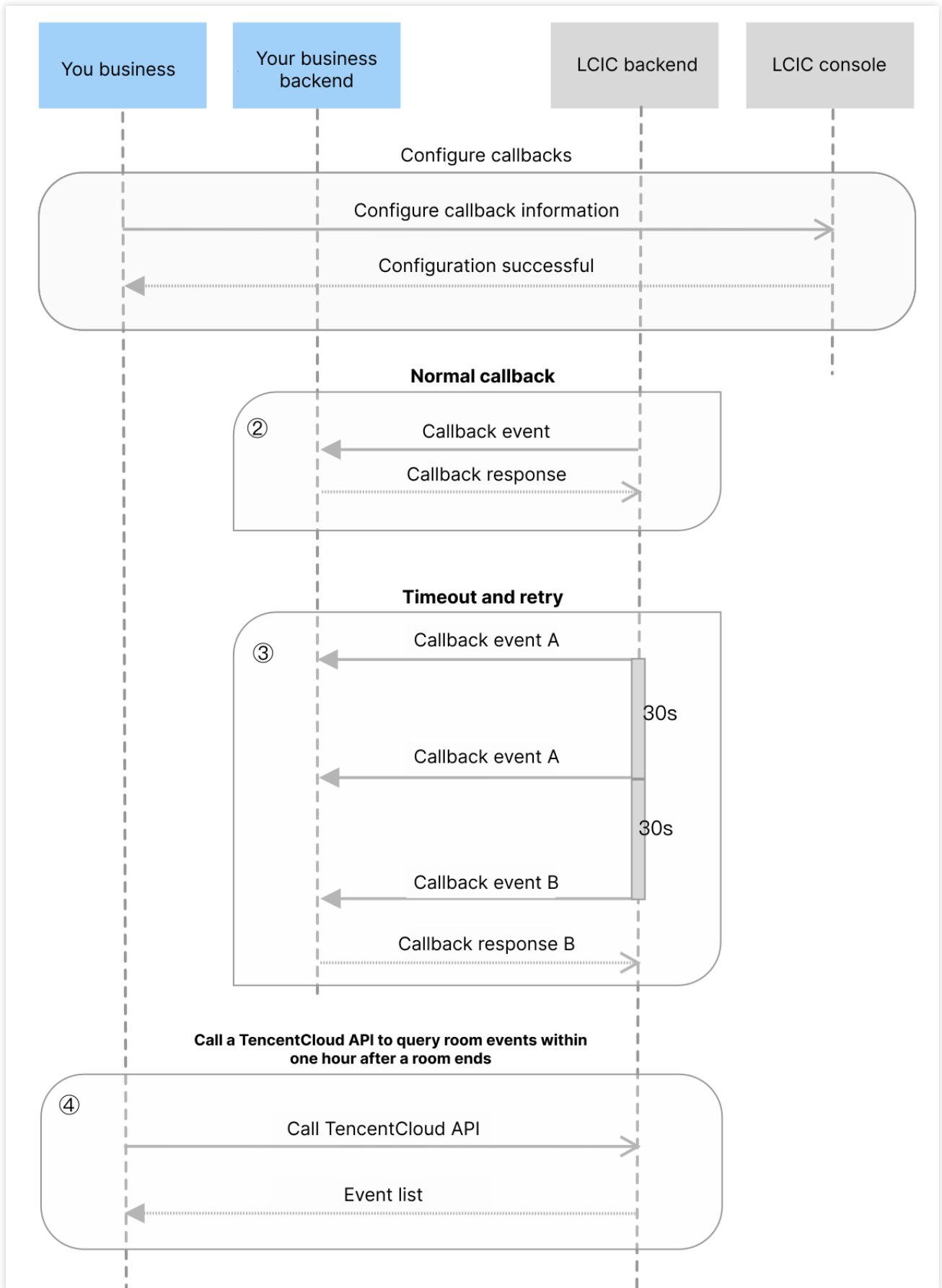
Service Callbacks

Last updated : 2023-09-05 18:14:00

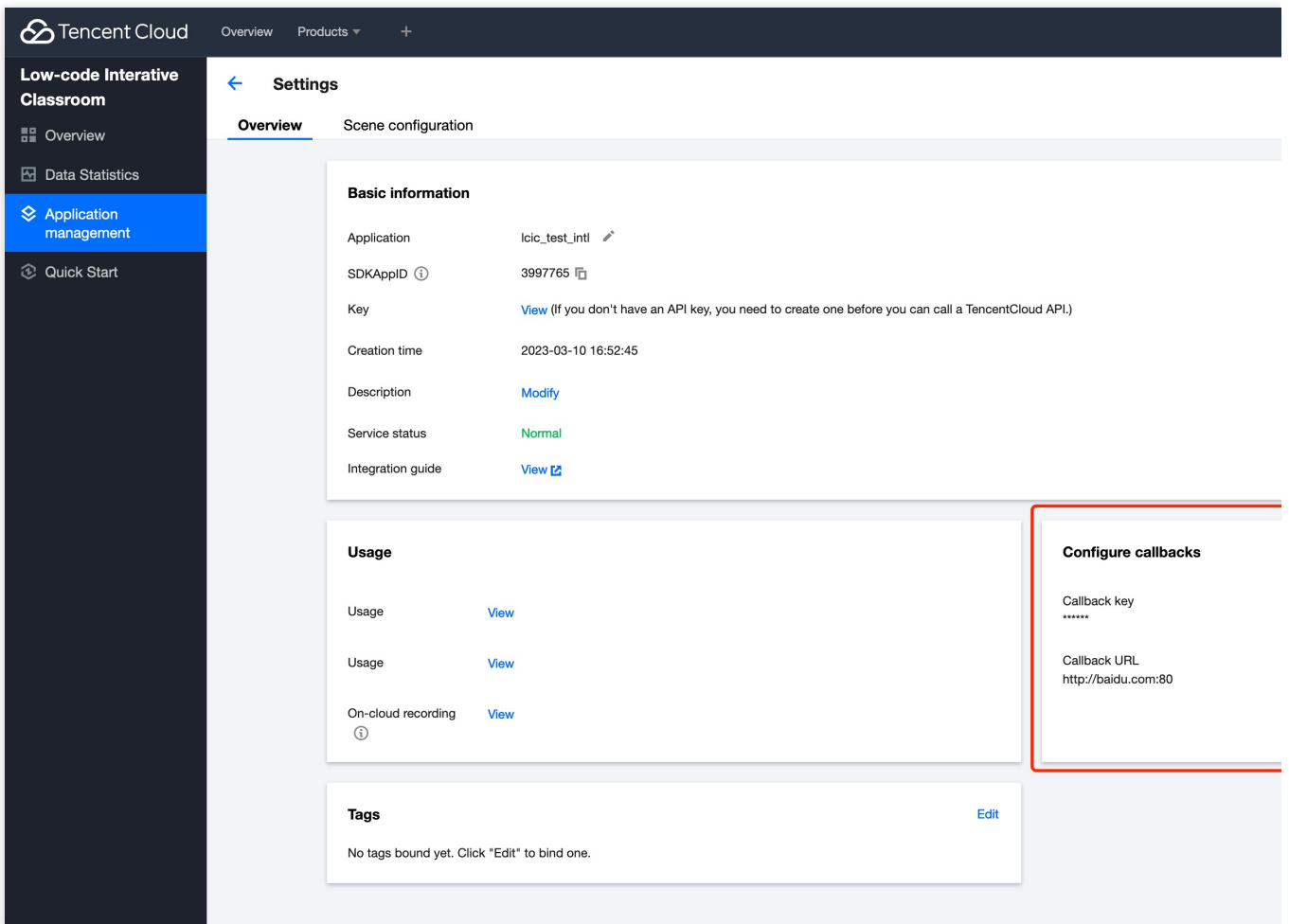
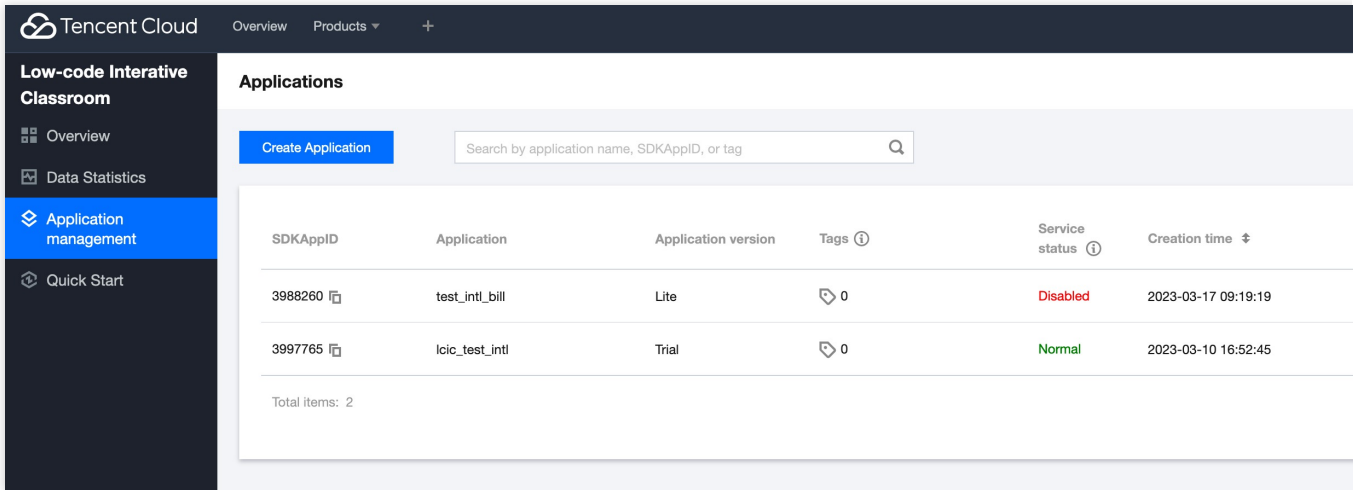
Overview

Note:

LCIC can send you callbacks to notify you of different events in your business. They allow you to collect statistics before, during, and after classes.



1. Configure a callback URL: Go to the LCIC console and select **Application Management** on the left sidebar. Click **Settings**, and configure a callback URL in the **Configure callbacks** area.



2. You can use the [GetRoomEvent](#) API to obtain the events of a room. This API must be called within one hour of the end of a class. After one hour, the room events will be cleared.

3. Room event list

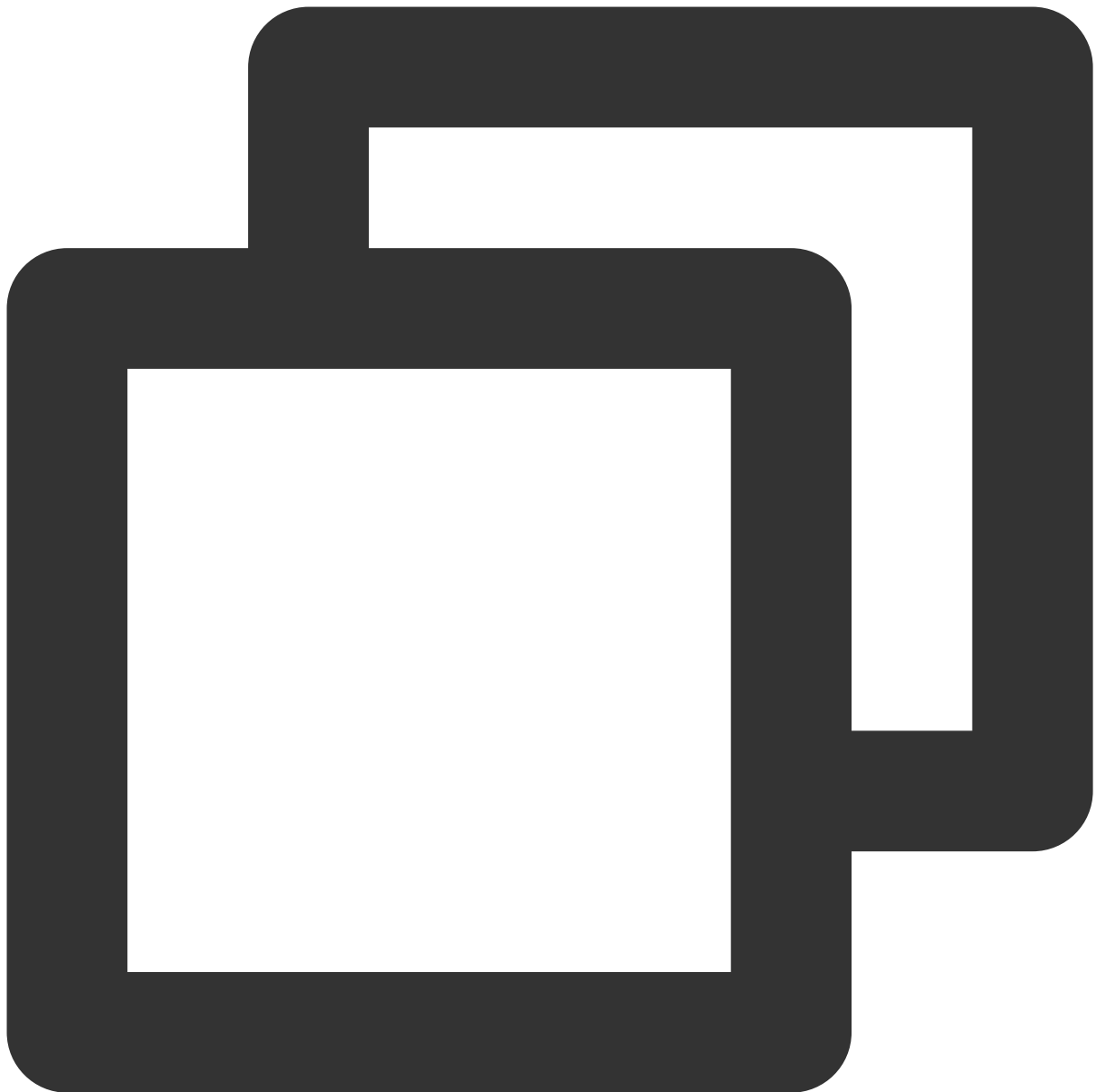
Event Type	Event Name	Description
Room events	RoomStart	The room started.
	RoomEnd	The room ended.
	RoomExpire	The room expired.
Recording events	RecordFinish	The recording ended.
Member events	MemberJoin	A user joined the room.
	MemberQuit	A user left the room.
Document events	DocumentTranscodeFinish	The transcoding of a document is finished.
	DocumentCreate	A document was created.
	DocumentDelete	A document was deleted.

Calculating the Callback Signature

Note:

Callback authentication is not required. However, for security reasons, we recommend you authenticate callbacks on your business server.

LCIC provides a callback key to authenticate callback messages. Below is the signature algorithm:



```
Sign = md5(CallbackKey+ExpireTime)
```

Example:

```
CallbackKey = NjFGoDEy
```

```
ExpireTime = 1614151508
```

```
Sign = md5(NjFGoDEy1614151508) = b9454ab5a85f9b7ad36071f5688ed34d
```

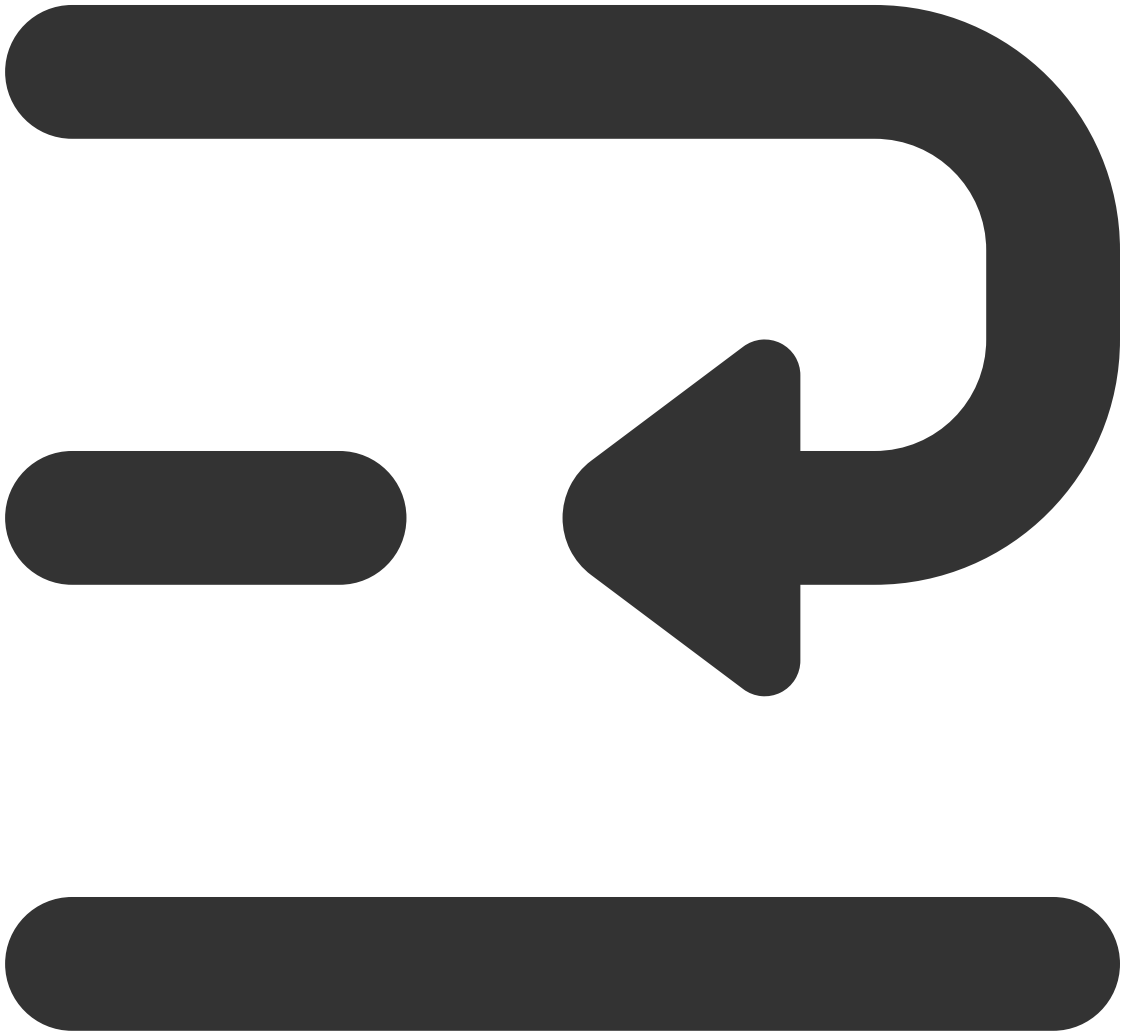
`ExpireTime` is the signature expiration time. If the time specified by `ExpireTime` in a message notification has elapsed, the notification can be considered invalid. This can prevent network replay attacks. The format of this

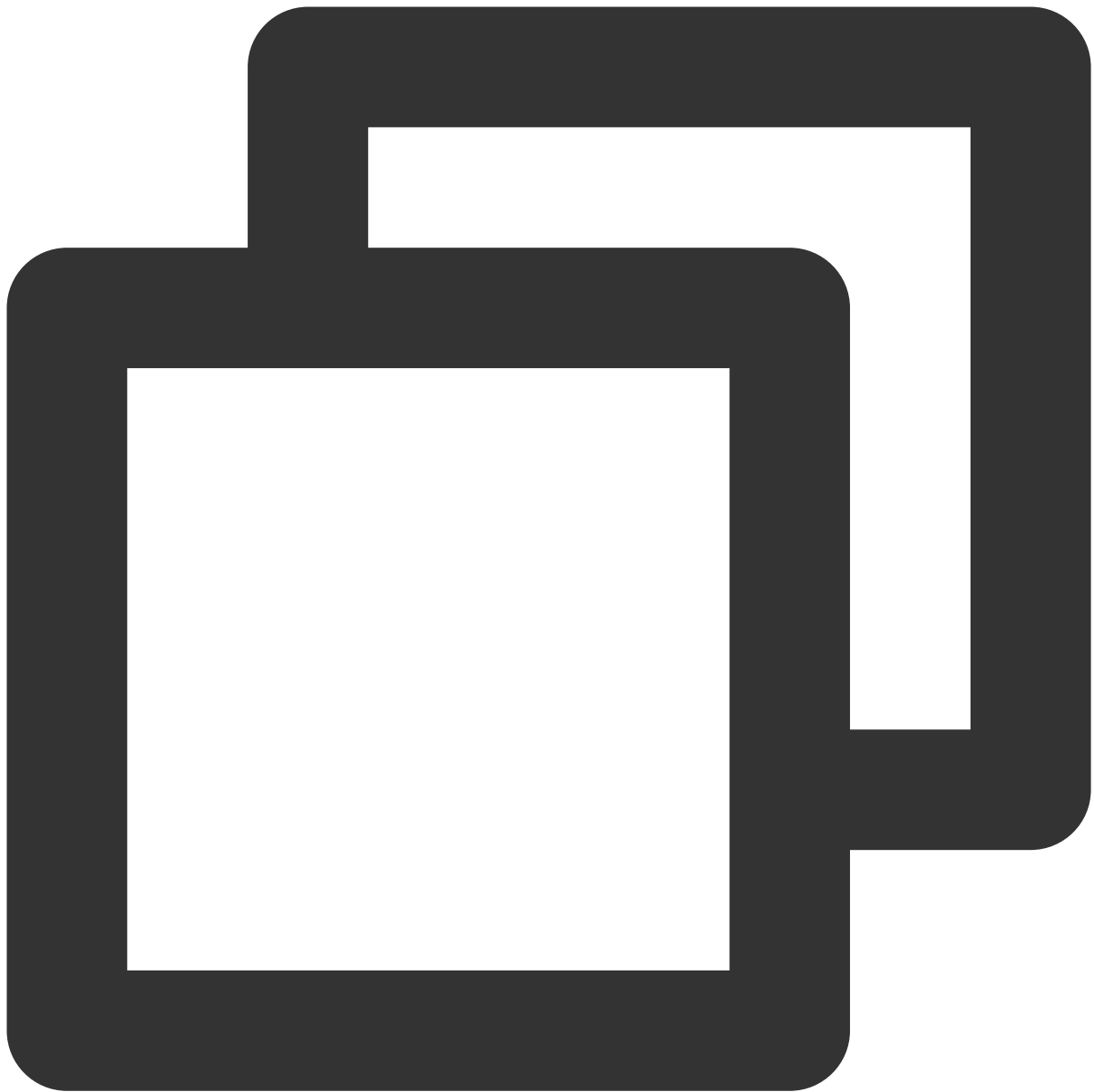
parameter is a decimal Unix timestamp, i.e., the number of seconds that have elapsed since 00:00 (UTC/GMT time) on January 1, 1970.

Go

Java

Python3



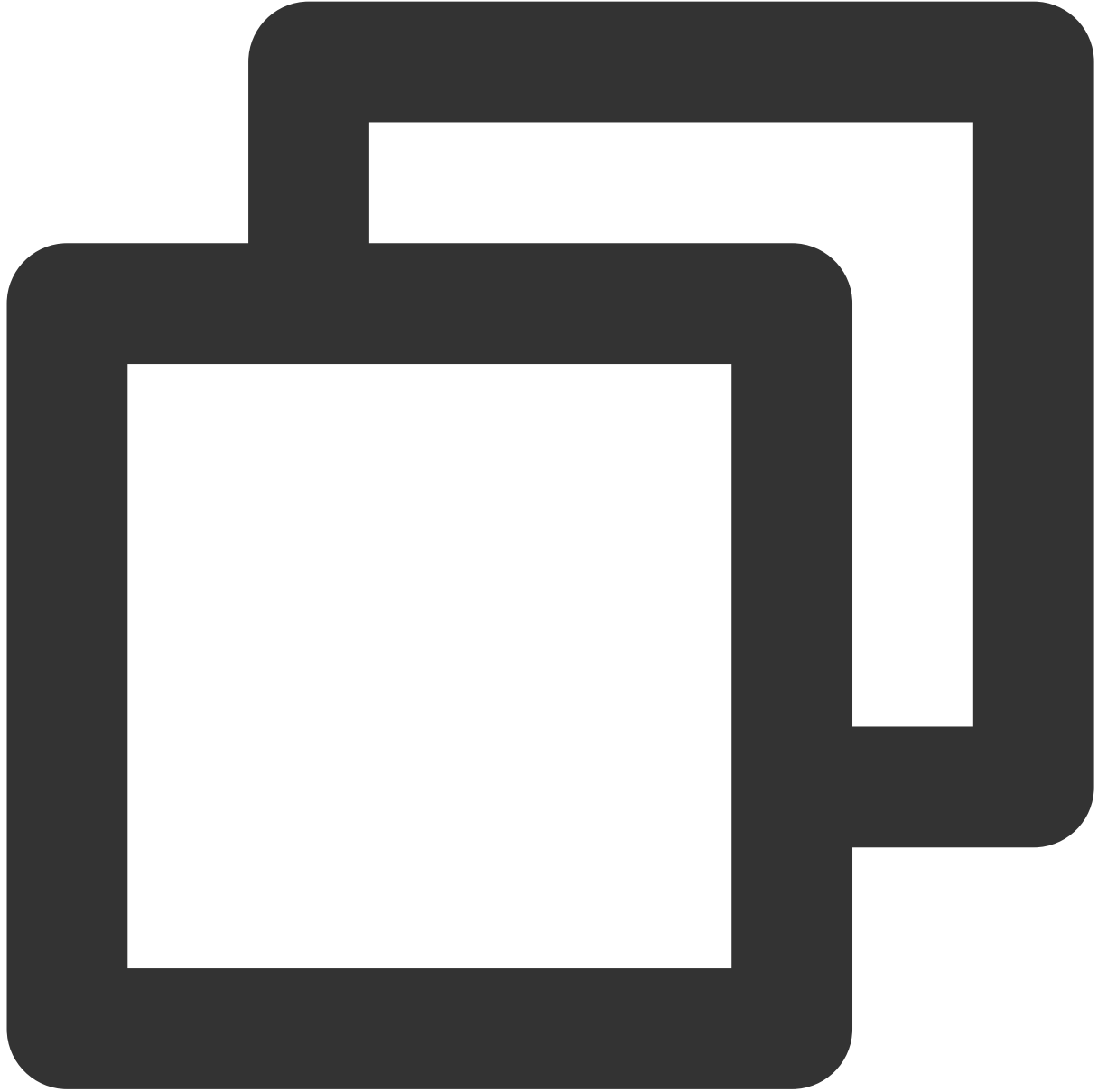


```
package main

import (
    "crypto/md5"
    "fmt"
)

func main(){
    callbackKey := "NjFGoDEy"
    expire := 1614151508
    sign := fmt.Sprintf("%x", md5.Sum([]byte(callbackKey+fmt.Sprintf("%d", expire)))
```

```
fmt.Printf(fmt.Sprintf("sign:%s", sign)) // sign:b9454ab5a85f9b7ad36071f5688e
}
```



```
String md5Str = DigestUtils.md5DigestAsHex("NjFGoDEy1614151508".getBytes());
```



```
# Python 3 code to demonstrate the
# working of MD5 (string - hexadecimal)

import hashlib

# initializing string
str2hash = "NjFGoDEy1614151508"
result = hashlib.md5(str2hash.encode())

# printing the equivalent hexadecimal value.
print("sign:", end = "")
```

```
print(result.hexdigest()) #sign:b9454ab5a85f9b7ad36071f5688ed34d
```

The callback request you receive will include the `ExpireTime` parameter and the `Sign` parameter, which you can use together with the callback key to determine whether the request is legitimate.

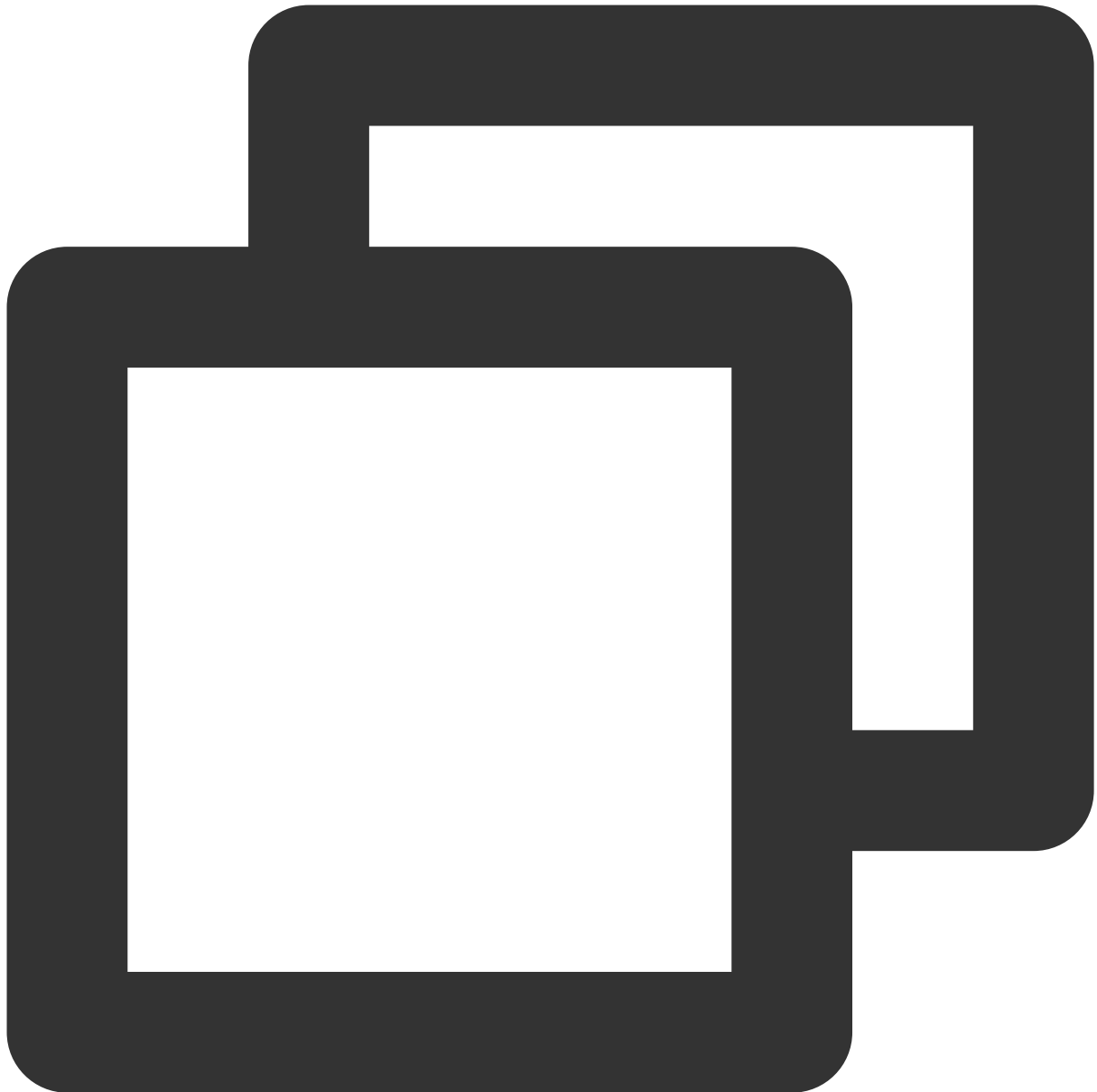
Callback Protocol

We will send an HTTP POST request to the callback URL you configured. The request body is in JSON format:

Parameter	Type	Description
Timestamp	Integer	The Unix timestamp (seconds) when the event occurred.
ExpireTime	Integer	The Unix timestamp (seconds) when the signature expires. If the current time is later than the expiration time, the request can be considered invalid.
Sign	String	The callback signature. You can use the method described above to determine whether the signature is correct and consequently whether the request is legitimate.
SdkAppId	Integer	The application the event belongs to.
EventType	String	See the descriptions of different callback types.
EventData	JSON	See the descriptions of different callback types.

[Callback request example](#)

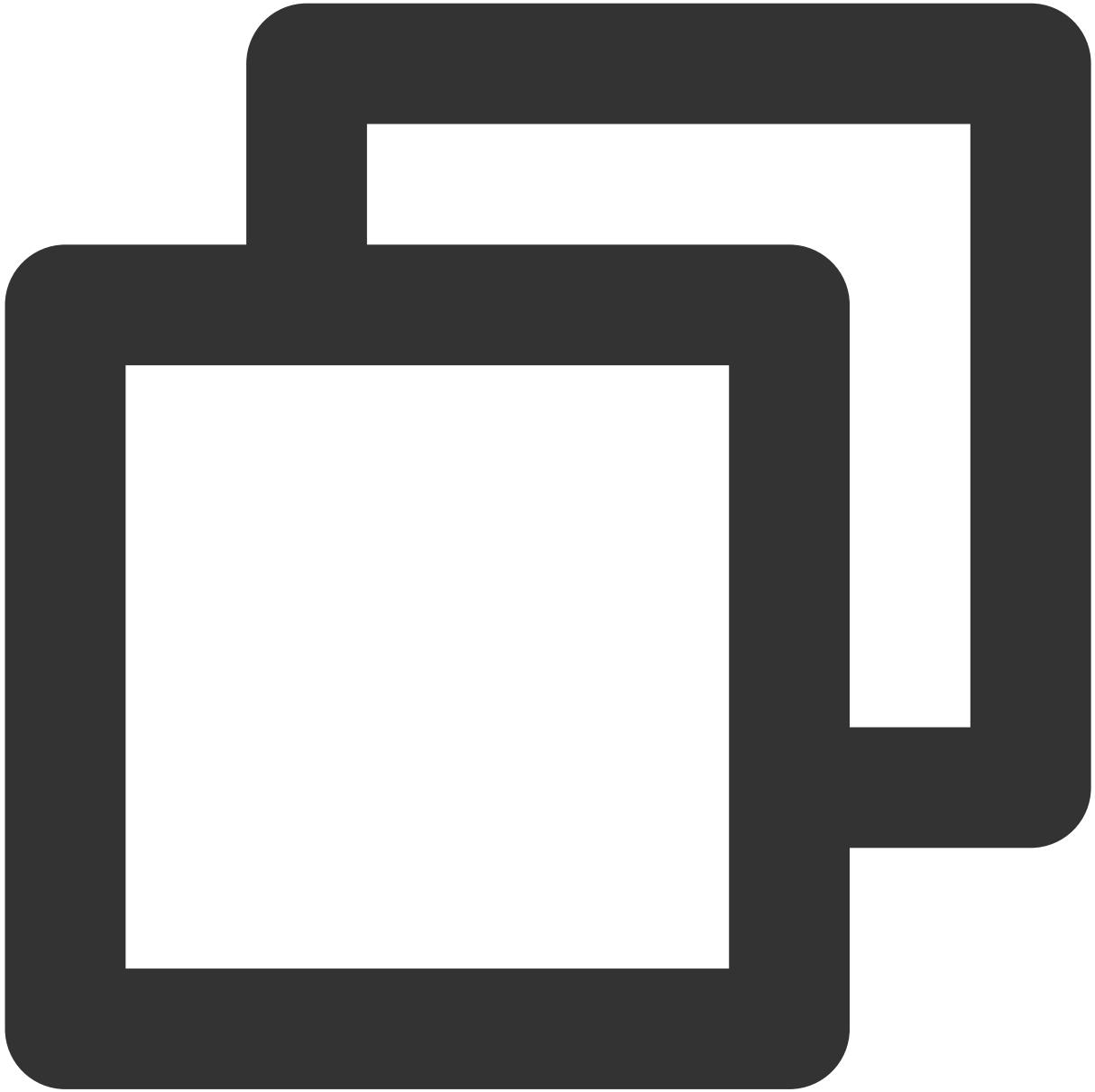
[Callback response example](#)



```
POST xxxxxxxxxxxxxxxx(user-callback-url)
Content-Type: application/json; charset=utf-8
Accept: application/json

{
  "Timestamp":1679279232,
  "ExpireTime":1679279832,
  "Sign":"fbfd23733e6262f49e402247024fbc29", // See "Calculating the Callback S
  "SdkAppId":3520371,
  "EventType":"RoomStart",
  "EventData":{
```

```
"RoomId":366317280
}
}
```



Response: HTTP STATUS CODE = 200. You need to add `JSON: {"error_code":0}` to the r

HTTP STATUS CODE 200 OK

HTTP BODY:

```
{
```

```
"error_code":0  
}
```

Event List

Room start event

Event type

RoomStart

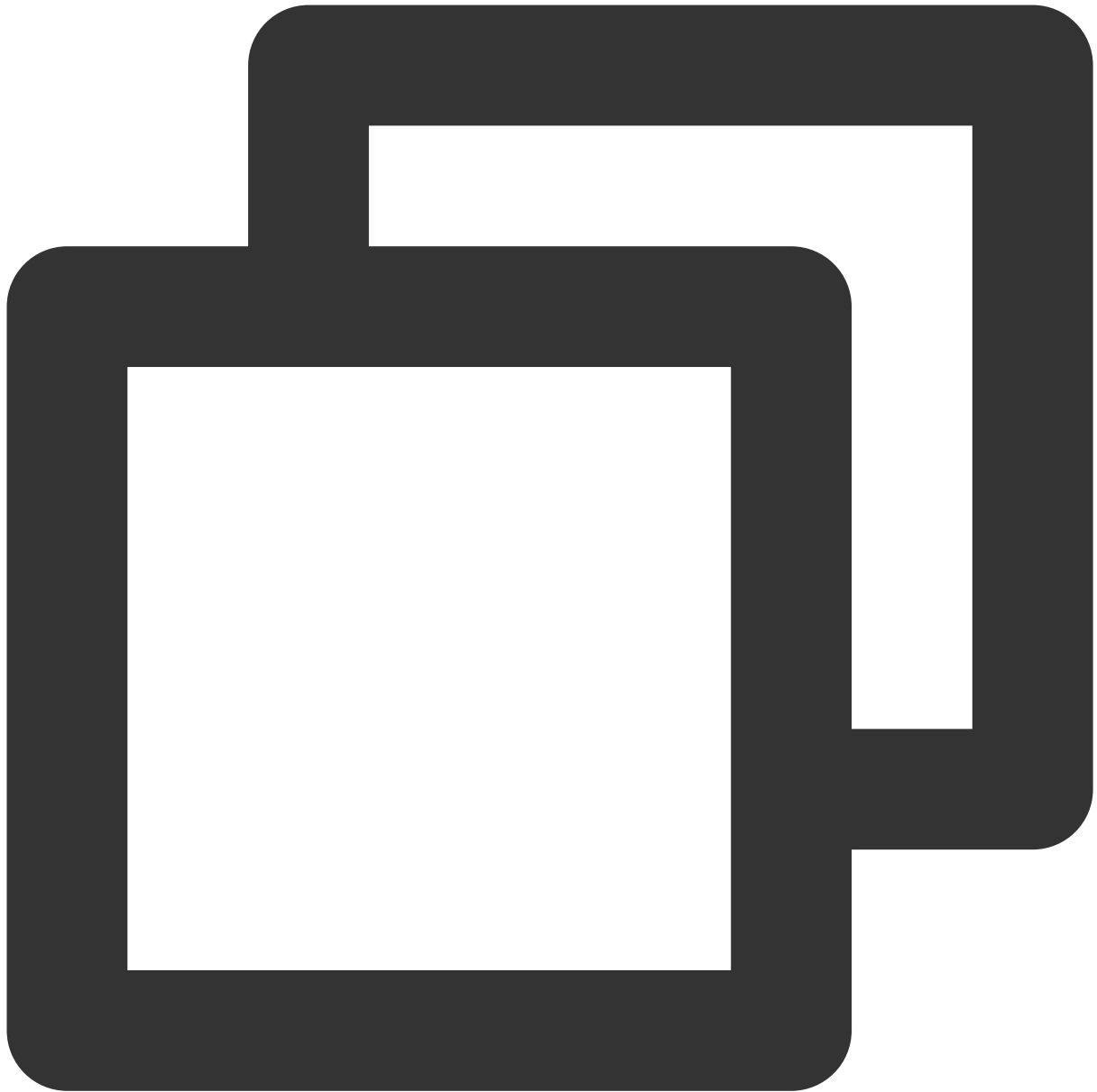
Description

This callback is sent when a room starts.

Fields

Field	Type	Description
RoomId	Integer	The room ID.

Example



```
{
  "Timestamp":1679279232,
  "ExpireTime":1679279832,
  "Sign":"fbfd23733e6262f49e402247024fbc29",
  "SdkAppId":3520371,
  "EventType":"RoomStart",
  "EventData":{
    "RoomId":366317280
  }
}
```


Room end event

Event type

RoomEnd

Description

This callback is sent when a room ends.

Fields

Field	Type	Description
RoomId	Integer	The room ID.

Example



```
{
  "Timestamp":1679279195,
  "ExpireTime":1679279795,
  "Sign":"696560af8fec9374b4cd58c6318c6448",
  "SdkAppId":3520371,
  "EventType":"RoomEnd",
  "EventData":{
    "RoomId":311601250
  }
}
```

Room expiration event

Event type

RoomExpire

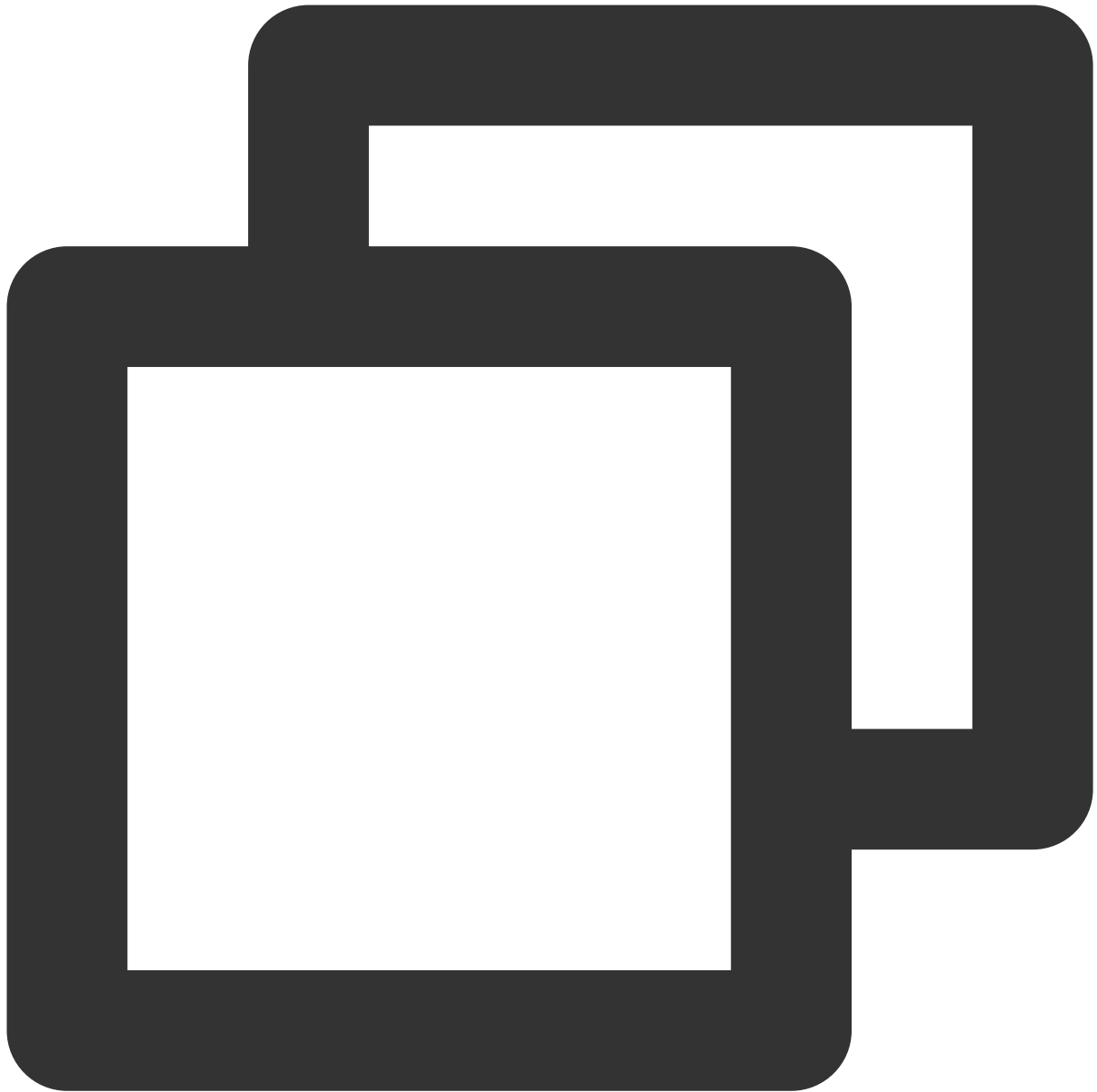
Description

This callback is sent when a room expires.

Fields

Field	Type	Description
RoomId	Integer	The room ID.

Example



```
{
  "Timestamp":1679282220,
  "ExpireTime":1679282820,
  "Sign":"07e504e36a3738cf17a47f47b37c0d3c",
  "SdkAppId":3520371,
  "EventType":"RoomExpire",
  "EventData":{
    "RoomId":310096990
  }
}
```

Recording completion event

Event type

RecordFinish

Description

This callback is sent when the system finishes recording a class and generates a playback URL.

Fields

Field	Type	Description
RoomId	Integer	The room ID.
Duration	Integer	The recording duration (seconds).
RecordUrl	String	The recording URL (HTTPS).
RecordSize	Integer	The recording file size (bits).

Example



```
{
  "Timestamp":1679279203,
  "ExpireTime":1679279803,
  "Sign":"7ada1f46f27ce6f1cdeb22339d71e094",
  "SdkAppId":3520371,
  "EventType":"RecordFinish",
  "EventData":{
    "Duration":63,
    "RecordSize":698472,
    "RecordUrl":"https://xxxxxxx.vod2.myqcloud.com/xxxx/xxxxxxx/f0.mp4",
    "RoomId":311601250
  }
}
```

```
}  
}
```

Member entry event

Event type

MemberJoin

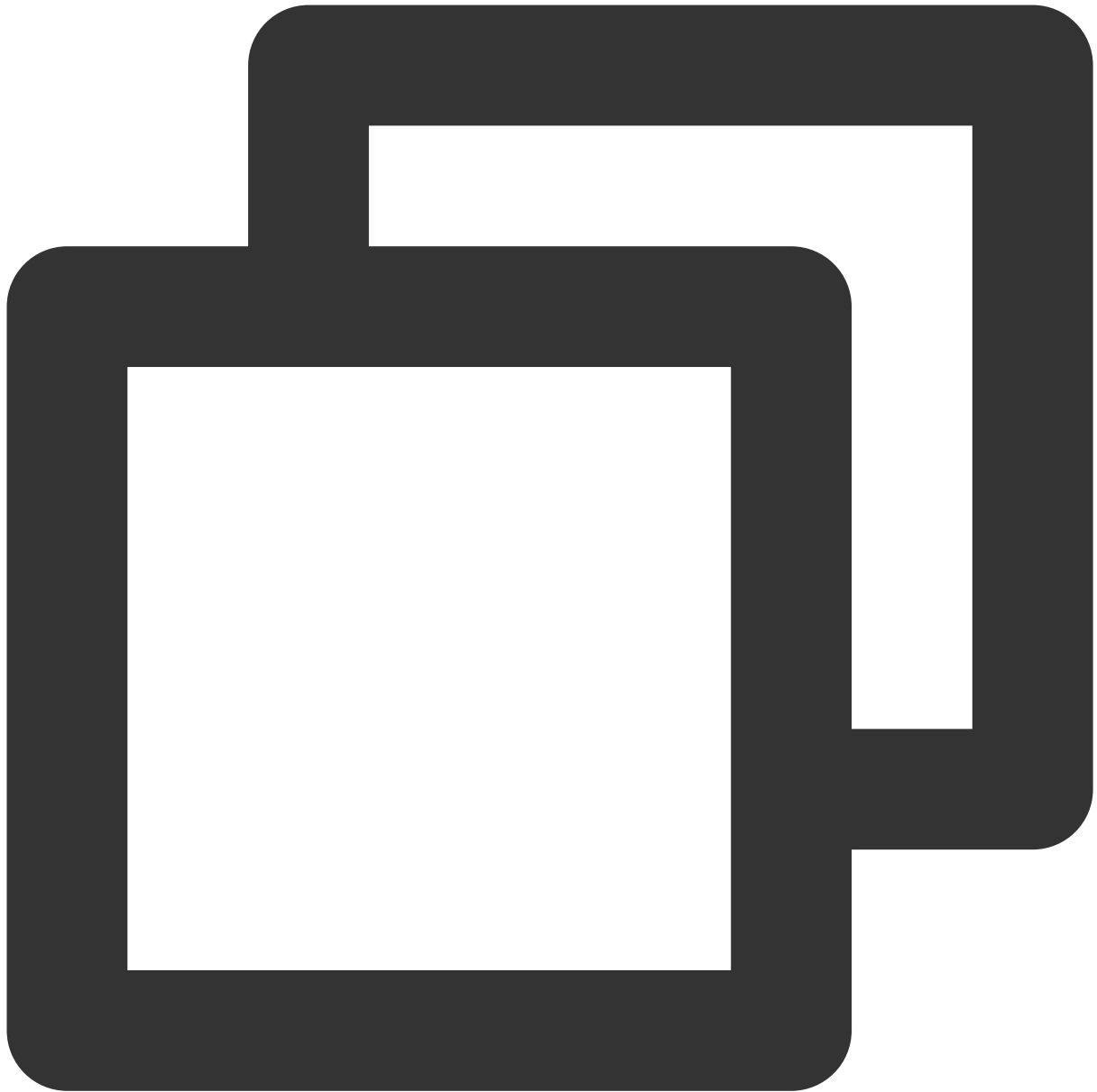
Description

This callback is sent when a user enters the room.

Fields

Field	Type	Description
RoomId	Integer	The room ID.
UserId	String	The user ID.

Example



```
{
  "Timestamp":1679279225,
  "ExpireTime":1679279825,
  "Sign":"6fc4f48026fe95d76d1615c44ea98ede",
  "SdkAppId":3520371,
  "EventType":"MemberJoin",
  "EventData":{
    "RoomId":366317280,
    "UserId":"2Lzh8d3Rw7zOlPEnNgHPe6HDiDn"
  }
}
```


Member exit event

Event type

MemberQuit

Description

This callback is sent when a user leaves the room.

Fields

Field	Type	Description
RoomId	Integer	The room ID.
UserId	String	The user ID.

Example



```
{
  "Timestamp":1679279260,
  "ExpireTime":1679279860,
  "Sign":"03d41254d4ba7a05e13299a4841c3d99",
  "SdkAppId":3520371,
  "EventType":"MemberQuit",
  "EventData":{
    "RoomId":397322814,
    "UserId":"2NG5xjpnYLG03bq1taJbItY1TPf"
  }
}
```

Document transcoding completion event

Event type

DocumentTranscodeFinish

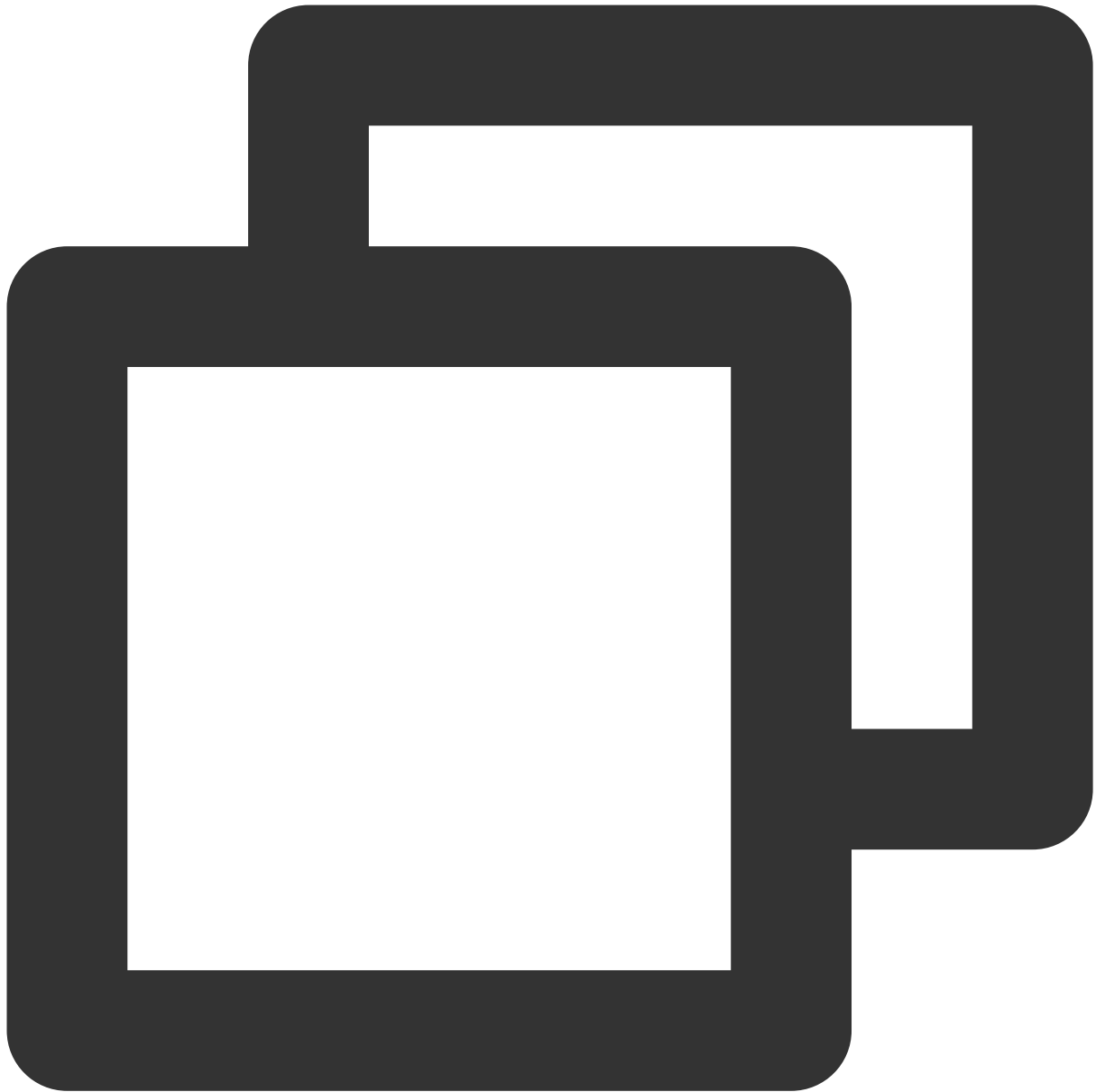
Description

This callback is sent when the transcoding of a courseware file is completed (succeeds or fails).

Fields

Field	Type	Description
DocumentId	String	The document ID.
State	Integer	The document status.
Result	String	The transcoding result. If the transcoding succeeded, this parameter is the URL of the transcoding output; if the transcoding failed, this parameter is the error code.
Info	String	The transcoding information.
Thumbnail	String	The thumbnail URL. A PowerPoint file usually has multiple thumbnails. The URL of the first thumbnail is <code>thumbnail_url/1.jpg</code> .

Example



```
{
  "Timestamp":1679281156,
  "ExpireTime":1679281756,
  "Sign":"1597c5c8aaafb623ece9d1690dc0e780",
  "SdkAppId":3520371,
  "EventType":"DocumentTranscodeFinish",
  "EventData":{
    "DocumentId":"sixkzoak",
    "Info":"",
    "Result":"https://xxx.cos.ap-shanghai.myqcloud.com/doc/xxxxxx/picture/",
    "State":3,
  }
}
```

```
    "Thumbnail": "https://xxxxx.cos.ap-shanghai.myqcloud.com/doc/xxxxx/thumbnail"
  }
}
```

Document creation event

Event type

DocumentCreate

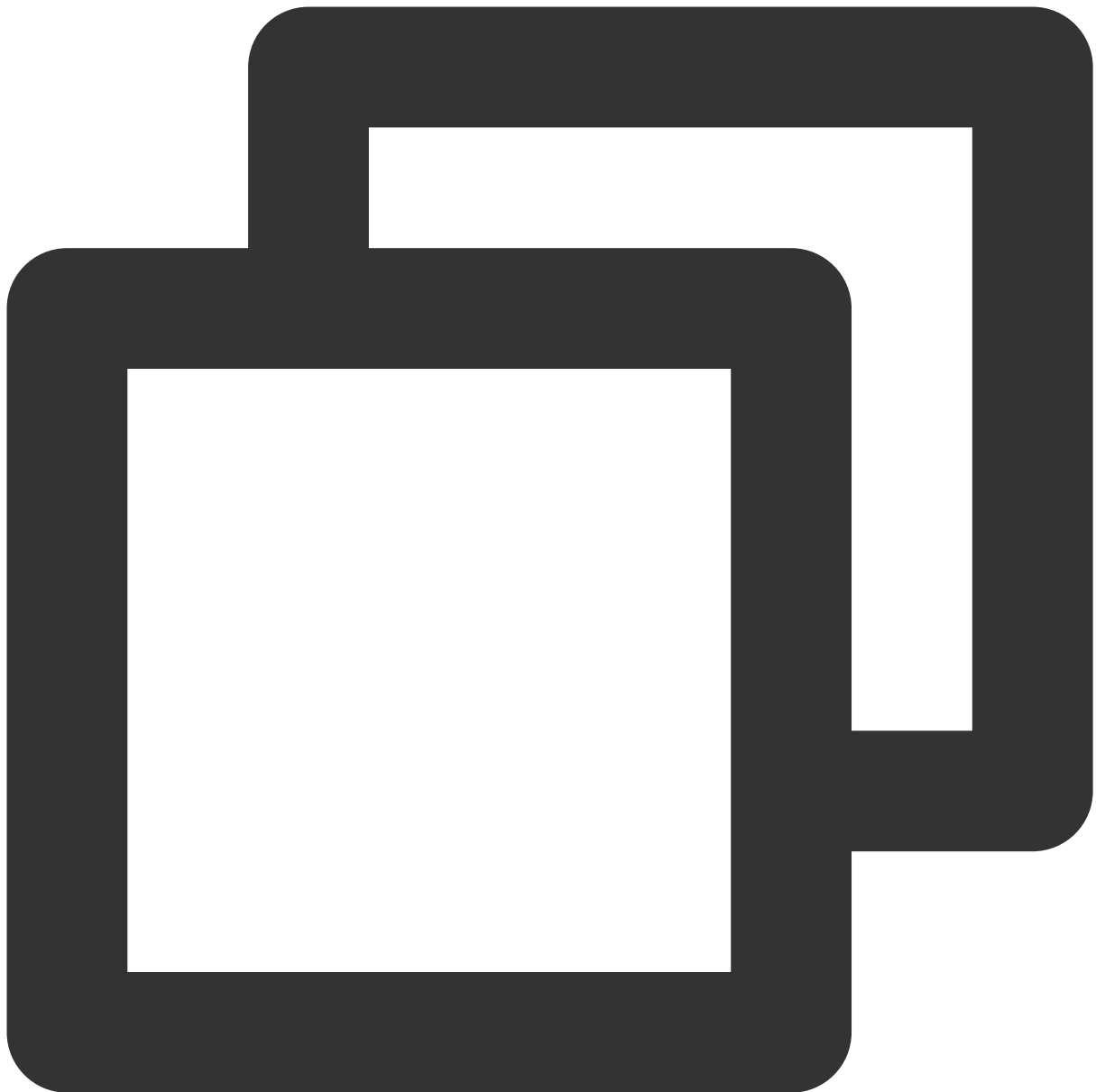
Description

This callback is sent when a document is successfully created.

Fields

Field	Type	Description
DocId	String	The document ID.
DocName	String	The document name.
Owner	String	The user ID of the document's owner.
DocSize	Integer	The file size (bytes).
DocUrl	String	The document URL.
Permission	Integer	The document access: <code>0</code> : Private; <code>1</code> : Public.

Example



```
{
  "Timestamp":1679281150,
  "ExpireTime":1679281750,
  "Sign":"44f0a2e422ede67100a1f419df3ef51c",
  "SdkAppId":3520371,
  "EventType":"DocumentCreate",
  "EventData":{
    "DocId":"sixkzoak",
    "DocName":"test.pdf",
    "DocSize":4162606,
    "DocUrl":"https://xxxx.cos.ap-shanghai.myqcloud.com/uploads/xxxxx/xxxxxx/xx
```

```
    "Owner": "2Lzh8d3Rw7zOlPEnNgHPe6HDiDn",  
    "Permission": 0  
  }  
}
```

Document deletion event

Event type

DocumentDelete

Description

This callback is sent when a document is successfully deleted.

Fields

Field	Type	Description
DocId	String	The document ID.

Example



```
{
  "Timestamp":1679281184,
  "ExpireTime":1679281784,
  "Sign":"964ff6d9463280d6a3bd4f7416213be9",
  "SdkAppId":3520371,
  "EventType":"DocumentDelete",
  "EventData":{
    "DocId":"sixkzoak"
  }
}
```


Custom event

Event type

TaskUpdate

Description

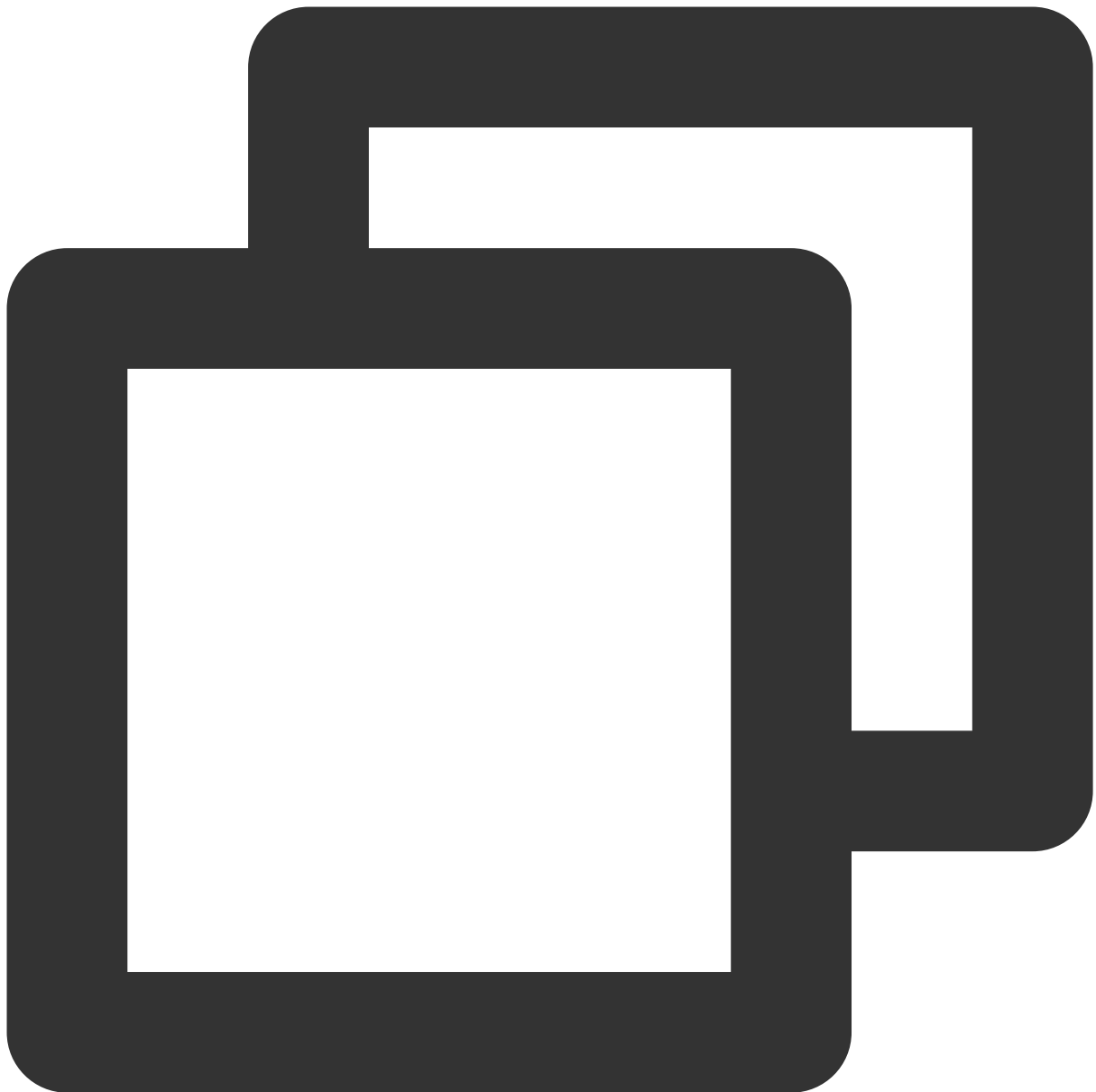
This callback is sent when JSAPI `updateTask` is called in the custom UI with the parameter `enableCallback = true`.

Fields

Field	Type	Description
RoomId	String	The room ID.
TaskId	String	task ID (<code>taskId</code> in <code>updateTask</code> , which can be modified)
CustomData	String	CustomData (<code>content</code> in <code>updateTask</code>)

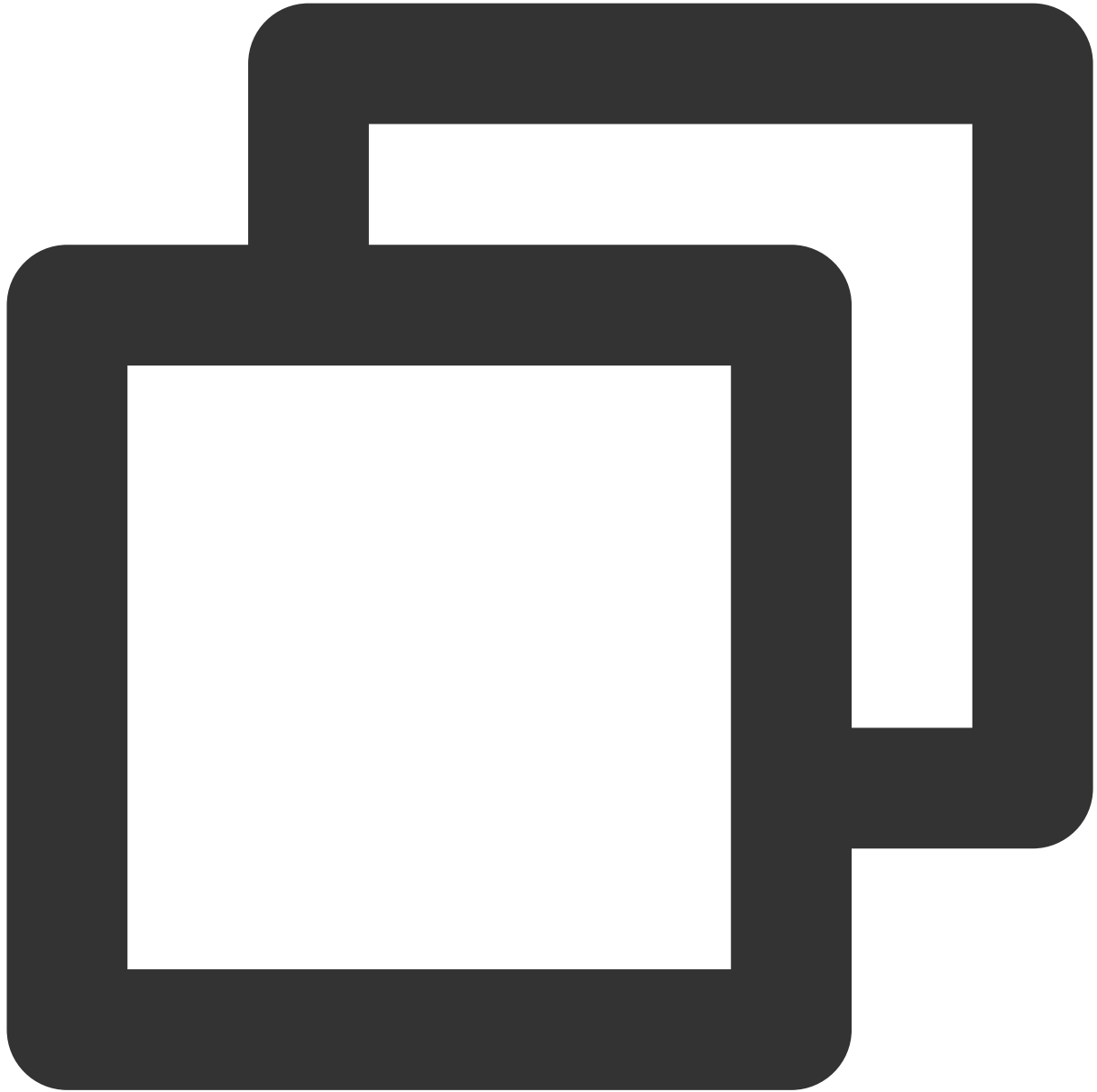
Example

JS Example Code



```
{
  "Timestamp": 1679281184,
  "ExpireTime": 1679281784,
  "Sign": "964ff6d9463280d6a3bd4f7416213be9",
  "SdkAppId": 3520371,
  "EventType": "TaskUpdate",
  "EventData": {
    "RoomId": "397322814",
    "TaskId": "your-task-id",
    "CustomData": "{\"key1\\\":\\\"value1\\\",\\\"key2\\\":\\\"value2\\\"}"
  }
}
```

```
}
```



```
TCIC.SDK.instance.updateTask(  
  'your-task-id', // taskId  
  JSON.stringify({ key1: 'value1', key2: 'value2' }), // content  
  -1, // duration  
  false, // createOnly  
  '', // bindingUser  
  true, // enableCallback  
);
```

