

Low-code Interactive Classroom

FAQs

Product Documentation



Copyright Notice

©2013-2024 Tencent Cloud. All rights reserved.

Copyright in this document is exclusively owned by Tencent Cloud. You must not reproduce, modify, copy or distribute in any way, in whole or in part, the contents of this document without Tencent Cloud's the prior written consent.

Trademark Notice



All trademarks associated with Tencent Cloud and its services are owned by Tencent Cloud Computing (Beijing) Company Limited and its affiliated companies. Trademarks of third parties referred to in this document are owned by their respective proprietors.

Service Statement

This document is intended to provide users with general information about Tencent Cloud's products and services only and does not form part of Tencent Cloud's terms and conditions. Tencent Cloud's products or services are subject to change. Specific products and services and the standards applicable to them are exclusively provided for in Tencent Cloud's applicable terms and conditions.

Contents

FAQs

Billing

Recording

Interactive Whiteboard Lag

Screen Sharing

Dealing with Firewall Restrictions

Web

Electron

Mini Program

Device Performance Requirements

FAQs

Billing

Last updated : 2023-03-24 15:29:26

How is LCIC billed?

LCIC consists of the subscription service, basic services, and value-added services. For billing details, see [Billing Overview](#). New users can get a free trial to quickly run the demo.

How do I get a free trial?

Starting from September 1, 2022, a Tencent Cloud account which creates an application in the [LCIC console](#) for the first time can get 50 hours general class duration, 10 hours recording duration, 0.1 TB storage space, and 10 GB replay every month.

How do I view my bills and transaction history?

How do I view the details of my billable usage?

Real-time usage: You can directly view the usage data on the [Usage](#) page in the LCIC console. The data of one day is displayed at a five-minute granularity, and the data of multiple days is displayed at a daily granularity, accurate to the minute.

Billed usage: You can also [download](#) an Excel file of your billable durations in Tencent Cloud's billing center, which contains five-minute details and daily details, accurate to the second.

Why is my service status "Disabled"?

If the pay-as-you-go billing mode is not enabled, the service is automatically suspended when the free usage offered in the prepaid package is used up or expires. In that case, you can purchase another package to reactivate the service or directly [enable the pay-as-you-go billing mode](#).

If you have enabled pay-as-you-go, overdue payments will also lead to service suspension. The service will be resumed automatically after you [make the payment](#).

Recording

Last updated : 2023-05-08 18:20:36

How do I record a class?

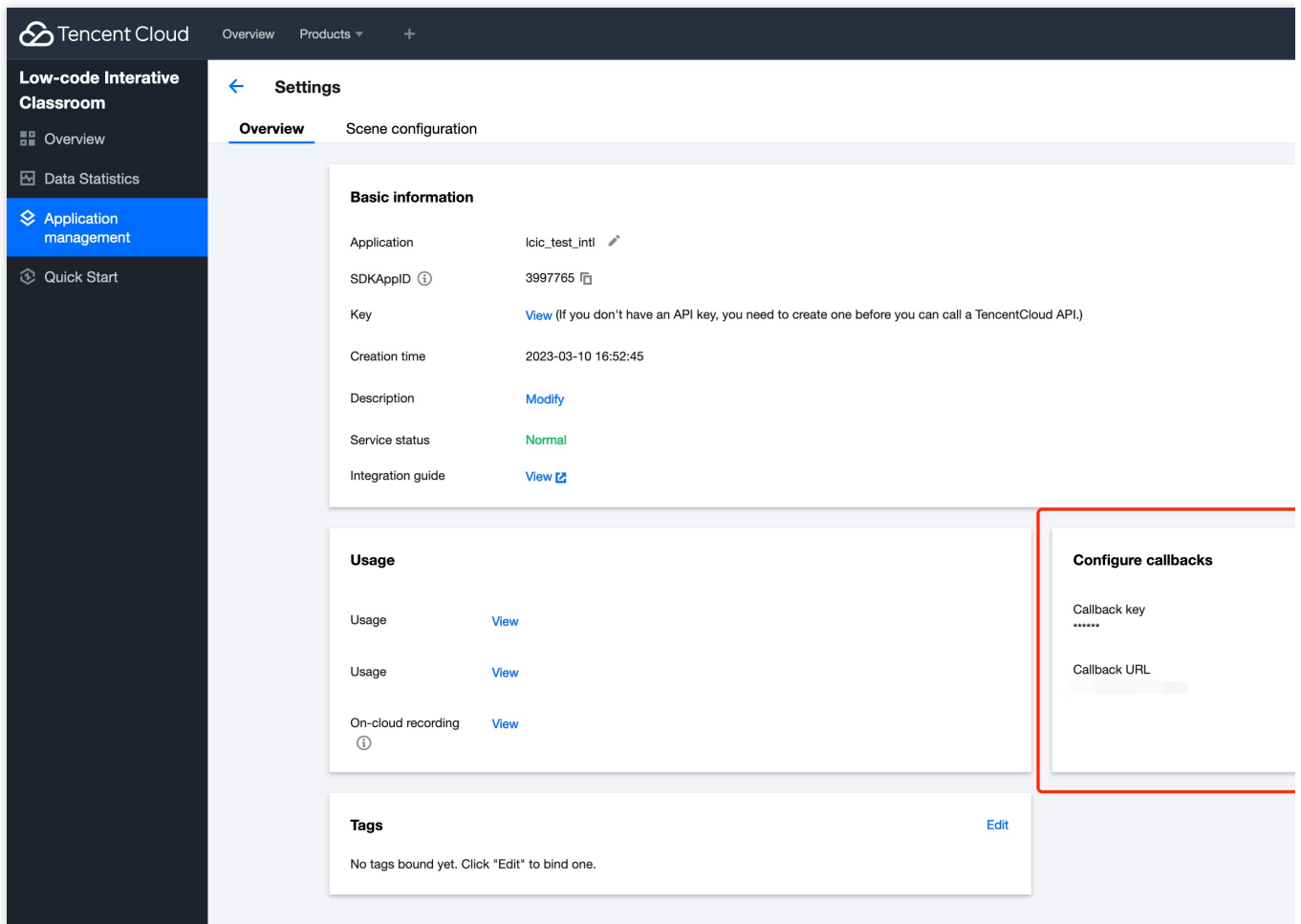
You can enable/disable HD recording by specifying the [DisableRecord](#) parameter when creating a room. If you do not specify the parameter, HD recording will be enabled by default.

What is the start and end time of a recording?

If you enable recording for a class, the system will start recording the class when the class actually begins and end recording when the class actually ends. For more information about the actual start and end time of a class, see [RealStartTime](#) and [RealEndTime](#).

How do I receive recording callbacks?

You need to go to the [LCIC console](#) and **configure a callback URL** for your application. For details, see [Listening for Server-Side Callbacks](#).



How do I obtain recording files?

A recording file will be generated after a class ends, and the [recording URL](#) will be returned.

How are recording files saved?

Recording files are saved automatically, which incurs storage costs. For details, see [Billing Overview](#).

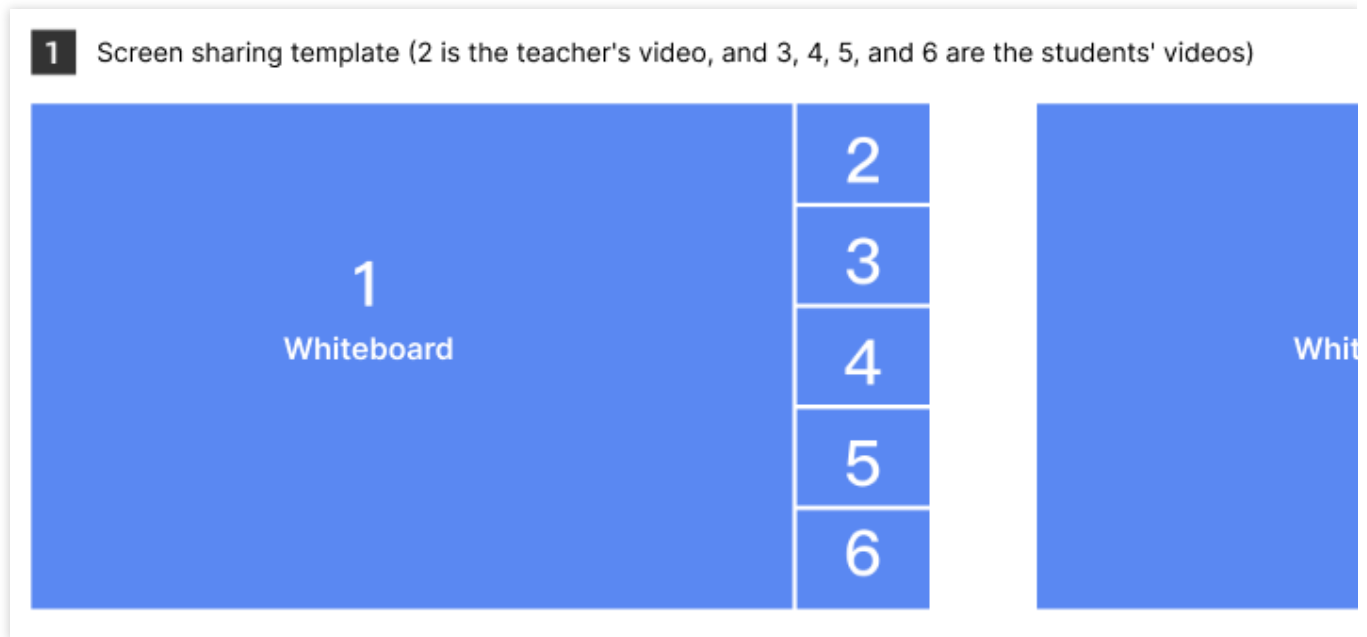
How to delete recording files?

LCIC allows you to delete a single recording file or multiple files at a time. For detailed directions, see [Recording Management APIs](#).

What recording templates are offered?

You can specify a recording template by setting the [RecordLayout](#) parameter when creating a room. This template cannot be changed during the class. The following recording templates are offered.

Screen sharing templates (`replay_layout=0` or `replay_layout=3`)



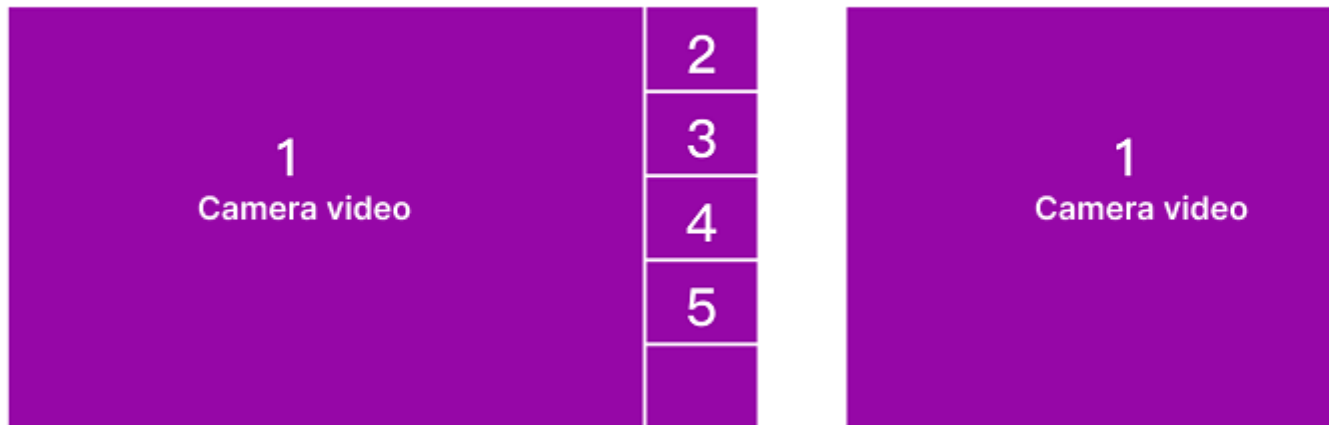
Note:

As shown above, in a screen sharing template, 1 is the whiteboard/screen sharing area, 2 is the teacher's video, and 3, 4, 5, and 6 are the students' videos.

If `replay_layout` is `0`, the aspect ratio of the teacher's and students' videos (2, 3, 4, 5, 6) is 1:1. If the original aspect ratio is not 1:1, the video will be cropped.

If `replay_layout` is `3`, the aspect ratio of the teacher's and students' videos (2, 3, 4, 5, 6) is 4:3. If the original aspect ratio is not 4:3, the video will be cropped.

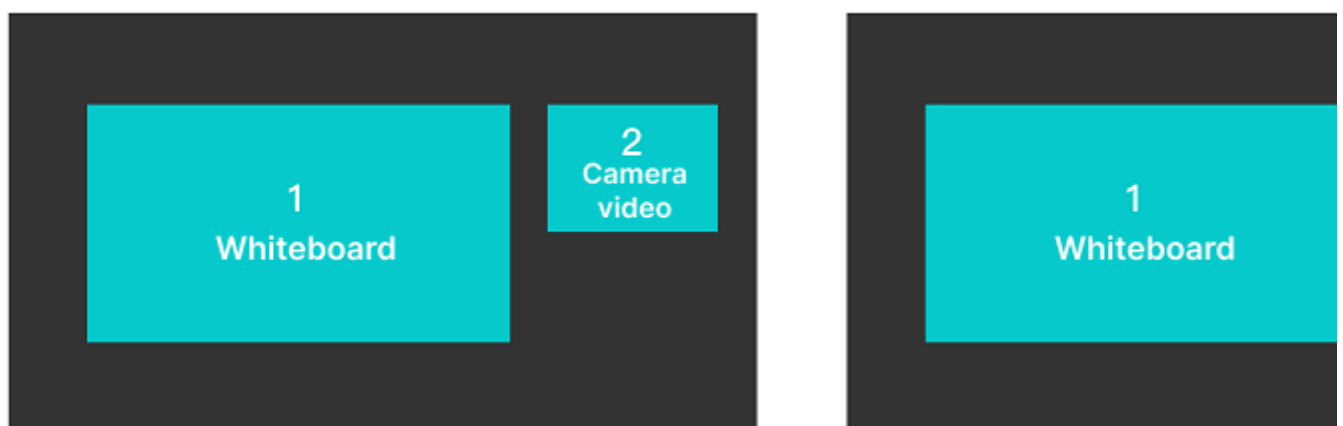
Teacher view templates (`replay_layout=1` or `replay_layout=4`)

2 Teacher view template (1 is the teacher's video, and 2, 3, 4, and 5 are the students' videos)**Note:**

As shown above, in a teacher view template, 1 is the teacher's large video, and 2, 3, 4, and 5 are the students' small videos. If the teacher shows a student's video in the large window, 3, 4, 5, and 6 will show the students' small videos. If a class has no students (1v0), the teacher's video will fill the entire screen.

If `replay_layout` is 1, the aspect ratio of the teacher's and students' videos (1, 2, 3, 4, 5) is 1:1. If the original aspect ratio is not 1:1, the video will be cropped.

If `replay_layout` is 3, the aspect ratio of the teacher's and students' small videos on the right (2, 3, 4, 5, 6) is 4:3. If the original aspect ratio is not 4:3, the video will be cropped.

Custom layout templates (replay_layout=2 or replay_layout=5)**3 Custom background template****Note:**

As shown above, in a custom background template, 1 is the whiteboard/screen sharing area, and 2 is the teacher's video.

This template supports custom backgrounds, which you can set using the `setLayoutParams` API.

If the screen is shared, the whiteboard area will show the shared the screen.

If `replay_layout` is 2, the aspect ratio of the teacher's video (2) is 4:3. If the original aspect ratio is not 4:3, the video will be cropped.

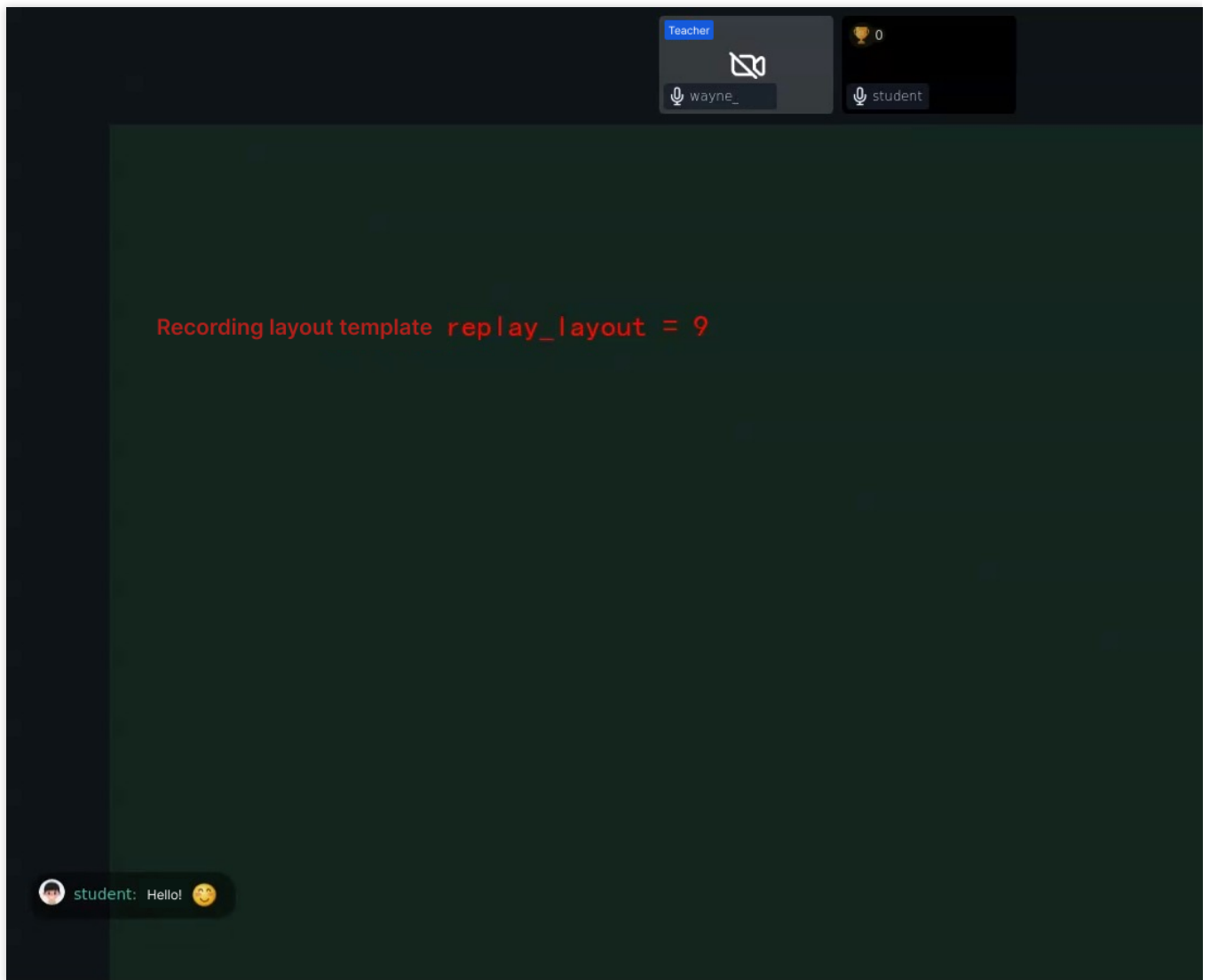
If `replay_layout` is 5, the aspect ratio of the teacher's video (2) is 1:1. If the original aspect ratio is not 1:1, the video will be cropped.

Class page recording template (replay_layout=9)

Note:

The class page recording template better reproduces a class. It records the chat history and switch of layouts. We recommend you use this template.

Example:

**Note:**

This template does not support relay.

Interactive Whiteboard Lag

Last updated : 2023-03-24 15:29:26

Note:

If brush strokes are unsmooth when the user writes or graffiti and the brush feature cannot be used normally, this problem is caused by Windows Ink, which needs to be disabled.

Disabling Windows Ink for the Drawing Tablet

Note:

This document takes a Wacom drawing tablet as an example. The configuration methods for drawing tablets of other brands and models may differ slightly.

Downloading the driver

Official website: [Click here to download](#) official device drivers.

Find the driver for your drawing tablet model and download and install it.

Configuring the drawing tablet

1. In the **Start** menu, enter "Wacom" to find and open **Wacom Tablet Properties**.
2. On the **Mapping** tab, deselect **Windows Ink**.
3. Save the configuration, close the window, and enter the class again.

Screen Sharing

Last updated : 2023-03-24 15:29:26

macOS Screen Recording Permission

Why does an authorization prompt keep popping up but I can't find my LCIC application in the authorization list?

The pop-up window only guides you to the authorization page, but whether your application is displayed in the authorization list is determined by the system. The logic for triggering the authorization prompt is encapsulated in the system and cannot be changed in general applications. Therefore, this problem is generally caused by a system issue.

Possible case 1

Another application in the system has requested the screen recording permission, so that the request for the permission by your LCIC application cannot be triggered. You can click



on the keyboard or Touch Bar to view all windows. If there is a pop-up window requesting screen recording authorization, approve or deny the request as needed.

Possible case 2

The problem may be caused by a system issue. If the prompt keeps popping up, you can open Activity Monitor, stop your LCIC process, and restart the application to trigger the request for the screen recording permission.

What should I do if the problem still persists?

On macOS, go to **System Preferences > Security & Privacy > Privacy**.

Select **Screen Recording** and the target application.

What should I do if I cannot find the target application in the Privacy application list?

You need to install the application again. You cannot directly double-click the installer.

Dealing with Firewall Restrictions

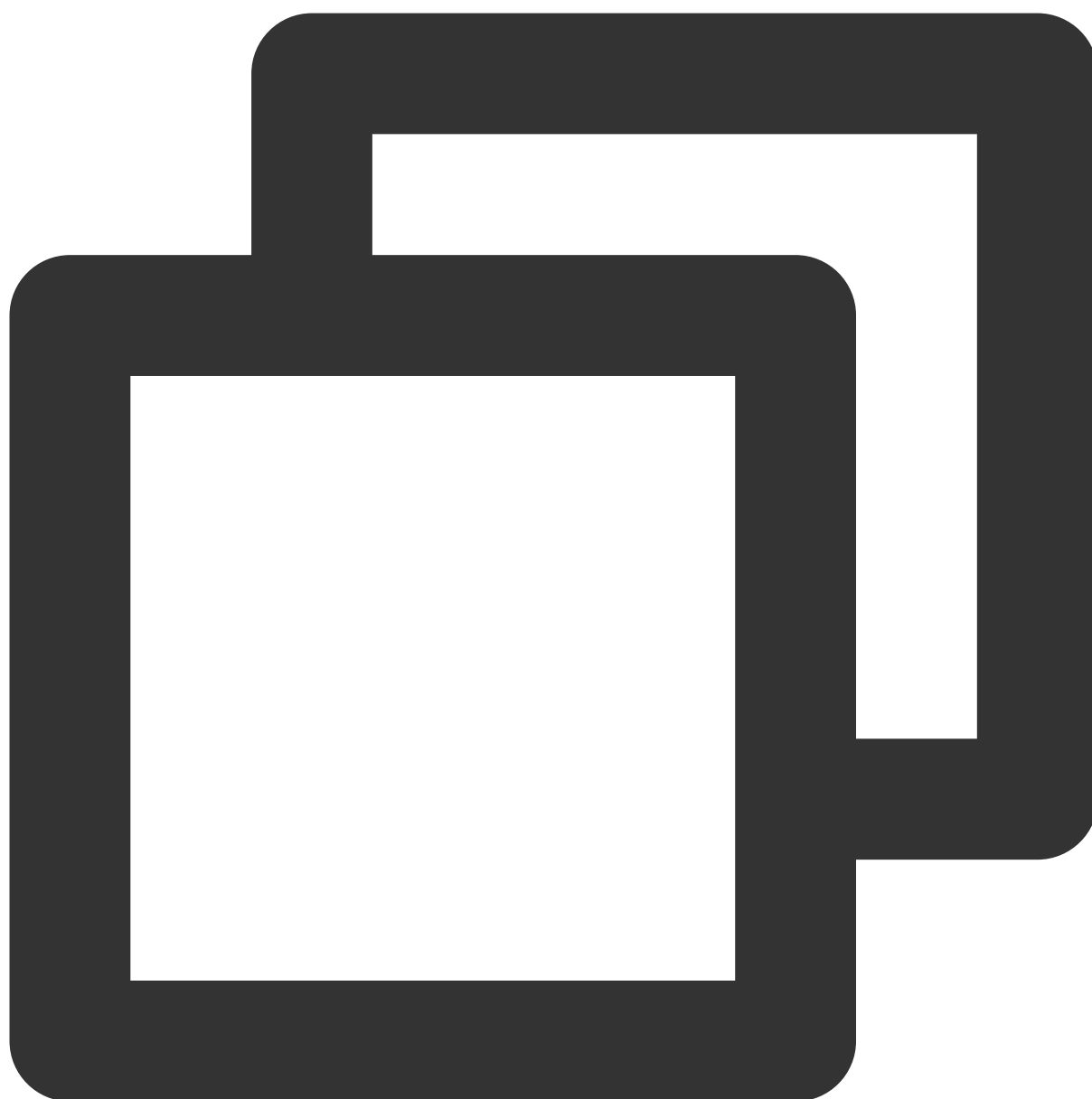
Last updated : 2023-03-24 15:29:26

What ports and domain names should I add to the allowlist of my firewall for a native SDK?

Add the following ports to the allowlist:

LCIC SDK (Native)	Allowed Item
TCP ports	443
UDP ports	8000, 8080, 8001, 8002, 8003, 8004, 8005, 8006, 8007, 8008, 8009, 16285, and 9000

Domain name allowlist:



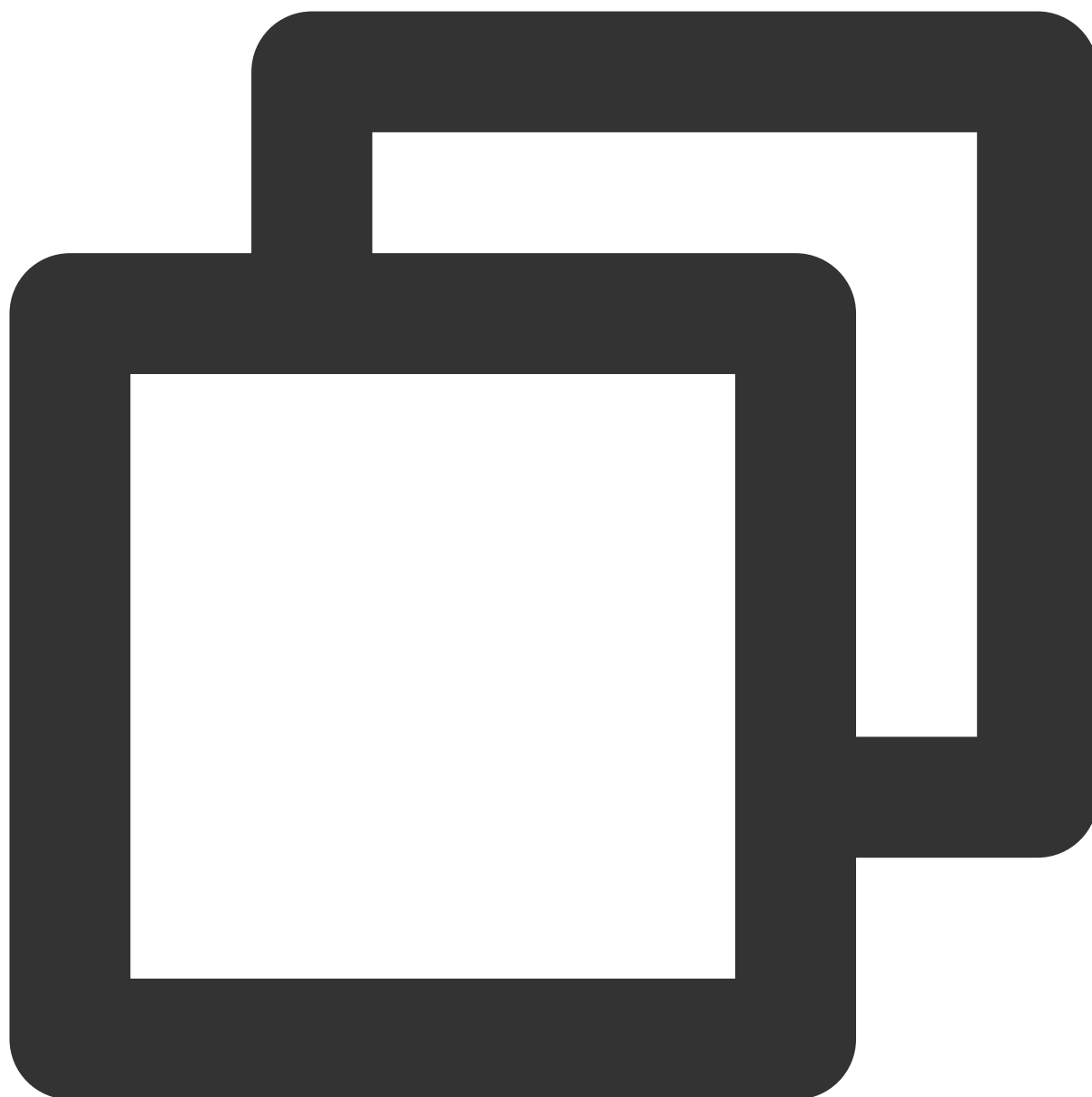
```
class.qcloudclass.com  
tcic-api.qcloudclass.com  
cloud.tim.qq.com  
yun.tim.qq.com  
*.trtc.tencent-cloud.com
```

What ports and domain names should I add to the allowlist of my firewall for web?

Add the following ports to the allowlist:

WebRTC (HTML5)	Allowed Item
TCP ports	8687
UDP ports	8000, 8080, 8800, 843, 443, and 16285

Domain name allowlist:



```
class.qcloudclass.com  
tcic-api.qcloudclass.com  
*.rtc.qcloud.com  
*.rtc.qq.com  
yun.tim.qq.com
```

Note:

Tencent Cloud server IP addresses are dynamically updated, so we cannot provide a list of fixed IPs.

Web

Last updated : 2023-09-05 11:11:24

Browser support

operating system	browser type	Minimum browser version requirements	students watch	teacher starts class	screen sharing
Windows	Chrome for desktop	56+	Supported	Supported	Support Chrome72+ version
	Desktop version of QQ browser (extreme speed kernel)	10.4+	Supported	Supported	Unsupported
	Desktop Firefox browser	56+	Supported	Supported	Support Firefox66+ version
	Edge browser for desktop	80+	Supported	Supported	Supported
	Desktop version of Sogou browser (high speed mode)	11+	Supported	Supported	Supported
	Desktop version of Sogou browser (compatibility mode)	-	Unsupported	Unsupported	Unsupported
	Opera browser for desktop	46+	Supported	Supported	Support Opera60+ version
	Desktop 360 Safe Browser (Extreme Speed Mode)	13+	Supported	Supported	Supported
	360 Safe Browser for Desktop	-	Unsupported	Unsupported	Unsupported

	(Compatibility Mode)				
	Embedded browser of desktop version WeChat	-	Supported	Unsupported	Unsupported
	Embedded browser of the desktop version of Enterprise WeChat	4.0.8+ (Enterprise WeChat)	Supported	Supported	Unsupported
Mac OS	Desktop Safari browser	11+	Supported	Supported	Support Safari13+ version
	Chrome for desktop	56+	Supported	Supported	Support Chrome72+ version
	Desktop Firefox browser	56+	Supported	Supported	Support Firefox66+ version
	Edge browser for desktop	80+	Supported	Supported	Supported
	Opera browser for desktop	46+	Supported	Supported	Support Opera60+ version
	Embedded browser of desktop version WeChat	-	Supported	Unsupported	Unsupported
	Embedded browser of the desktop version of Enterprise WeChat	4.0.8+ (Enterprise WeChat)	Supported	Supported	Unsupported
Android	WeChat embedded browser (TBS kernel)	-	Supported	Supported	Unsupported
	WeChat embedded	-	Supported	Supported	Unsupported

	browser (XWEB kernel)				
	Enterprise WeChat embedded browser	-	Supported	Supported	Unsupported
	Chrome for mobile	-	Supported	Supported	Unsupported
	Mobile QQ Browser	-	Unsupported	Unsupported	Unsupported
	UC Browser for Mobile	-	Unsupported	Unsupported	Unsupported
iOS 12.1.4+	WeChat embedded browser	-	Supported	Unsupported	Unsupported
iOS 14.3+	WeChat embedded browser	6.5+ (WeChat)	Supported	Supported	Unsupported
iOS	Enterprise WeChat embedded browser	4.0.8+ (Enterprise WeChat)	Supported	Supported	Unsupported
iOS 11.0+	Mobile Safari	11+	Supported	Supported	Unsupported
iOS 12.1.4+	Chrome for mobile	-	Supported	Unsupported	Unsupported
iOS 14.3+	Chrome for mobile	-	Supported	Supported	Unsupported

Note :

The latest version of the Chrome browser is recommended.

In other browsers, you can click [Web Aptitude Test](#) to check whether it supports it.

Mac Firefox screen sharing may have partial dislocation of the video area, and there is no way to avoid it. It is recommended to use Chrome or Safari browser for screen sharing.

Due to H.264 copyright restrictions, Huawei's Chrome browser and Chrome WebView-based browsers do not support the normal operation of low-code interactive classrooms.

Environmental requirements

If the user is in a restricted network (such as a corporate intranet with a firewall), it may be restricted by the firewall and cannot attend classes normally. At this point, you need to configure a whitelist for the following domain names and ports in the firewall:

TCP port : 8687

UDP port : 8000, 8800, 843, 443

domain name : qcloud.rtc.qq.com

Camera and microphone permission problem

Due to system permission settings, browser permission settings, or device occupancy, there are scenarios where the camera and microphone fail to be turned on. The specific tips are as follows:

error type	describe
<code>SystemPermissionDenied</code>	The browser does not have permission to access the camera and microphone, please check whether the system permission is enabled.
<code>UserPermissionDenied</code>	The user refuses the current application/page to access the camera permission, please check whether the browser permission is enabled.
<code>CouldNotStartVideoSource</code>	The browser does not have permission to access the camera or the camera is being used by other applications or browser tabs, please check whether the camera and microphone are occupied.
Generic	other.

SystemPermissionDenied

MacOS

Start "System Preferences", **select Security and Privacy > "Camera" or "Microphone"**, and confirm whether the current browser or application has access to the camera and microphone. If not, you need to open it.

Windows

Press the Windows logo key to enter the Settings tab, select "Microphone Privacy Fix", and confirm that "Allow desktop applications to access your microphone" is turned on.

UserPermissionDenied

Chrome browser

Press the following figure to confirm the check:

FireFox browser

Press the following figure to confirm:

Safari browser

Confirm by following the steps below:

Opera

Confirm by following the steps below:

In-class file upload limit

file type restrictions

file classification	Interactive Whiteboard supports file suffixes (case insensitive)	Support
file class	ppt pptx doc docx pdf	Support
Pictures	jpg jpeg png gif bmp	Support
audio class	mp3 wav wma aac flac m4a oga opus MP3 WAV WMA AAC FLAC M4A OGA OPUS	Support
video class	mp4 3gp mpg mpeg 3g2 avi flv wmv h264 m4v mj2 mov ogg ogv rm qt vob webm f4v rmvb	Support

File size limit

type	limit size	illustrate
Interactive whiteboard file class	100MB	Support pictures, documents, etc.
Interactive whiteboard audio	50MB	-
Interactive whiteboard video	500MB	-

IM chat picture	20MB	-
-----------------	------	---

Electron

Last updated : 2023-03-24 15:29:26

Why is Electron download slow or even stuck?

When download of the dependency package starts, it may be very slow, and a timeout error of npm even occurs after I wait for a long time.

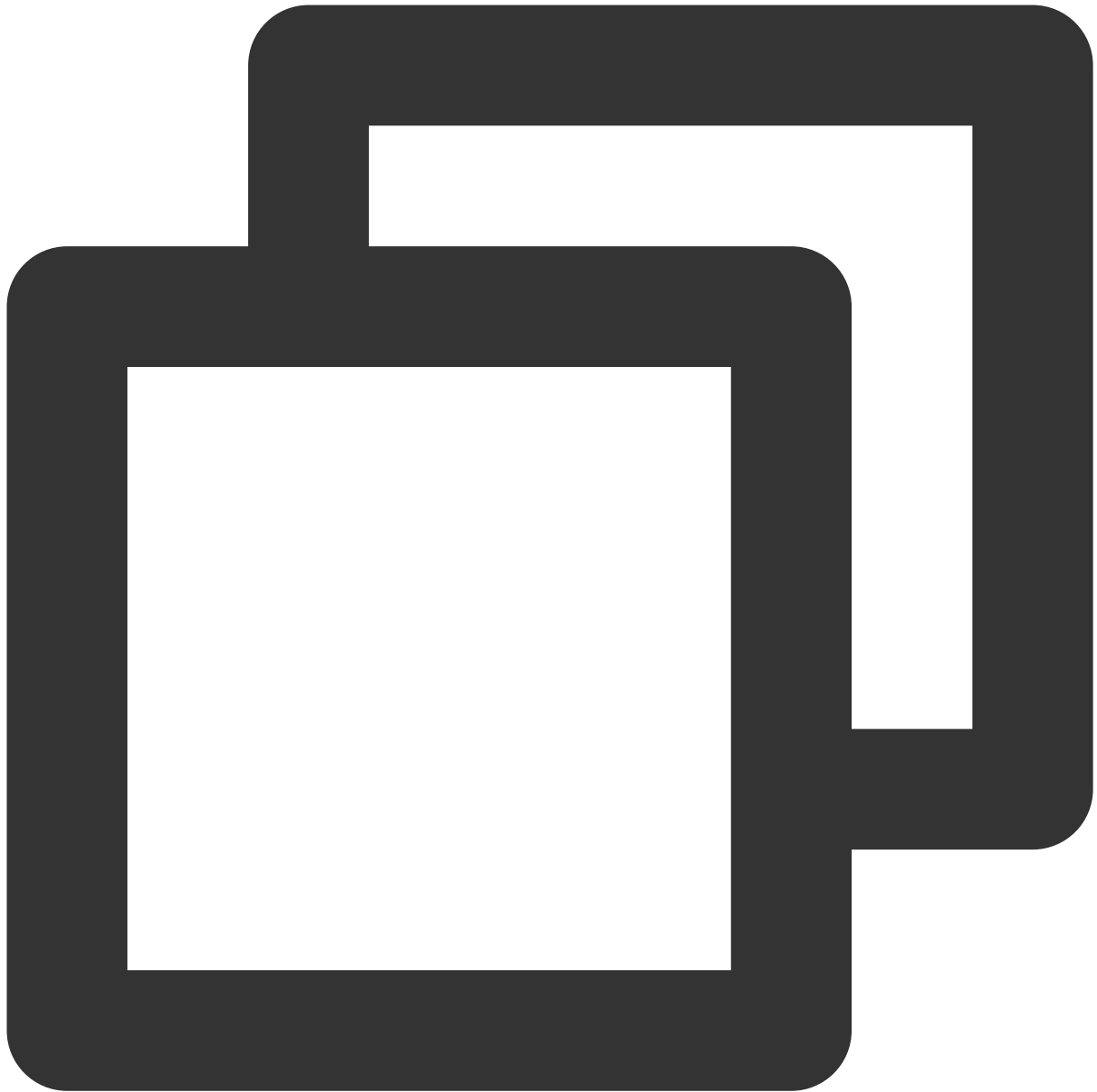
Solution A

If you work from an office in your company, you need to check whether the proxy configuration of npm points to the proxy server of your company and whether the `ELECTRON_GET_USE_PROXY` environment variable is configured, and if not, perform the following steps:

1. Set the npm proxy: `npm config set all_proxy=[your proxy address]`.
2. Configure the `ELECTRON_GET_USE_PROXY` environment variable, so that the Electron installation script will be downloaded through the npm proxy.

Solution B

If you use macOS, run the following command:



```
$ export ELECTRON_GET_USE_PROXY=true
```

Solution C

If you use Windows:

1. Right-click **PC** > **System Properties** > **Advanced** > **Environment Variables**.
2. Set the environment variable `ELECTRON_GET_USE_PROXY` as shown below and run `npm install` or `npm install --proxy=[your proxy address]` :

Mini Program

Last updated : 2023-07-13 17:34:49

Environmental issues

What are the environmental requirements for the Mini Program?

WeChat App iOS minimum version requirement: 7.0.9

WeChat App Android minimum version requirement: 7.0.8

The minimum version requirement of the applet base library: 2.10.0

Since the WeChat developer tools do not support native components (namely <live-pusher> and <live-player> tags), it needs to be run on a real device.

The uniapp development environment is not supported, please use the native applet development environment.

Does the applet support minimizing the floating window?

When the applet is minimized, there is audio and video in the classroom, and the audio can be collected and played normally when it is switched to the background. Otherwise, the audio and video call will be terminated when the applet is switched to the background.

What should I do if I can't see the picture when I enter multiplayer audio and video from the Mini Program?

1. Please use a real phone to run it. The emulator inside the WeChat developer tool does not currently support direct running.
2. Please use `wx.getSystemInfo` to query the version of the basic library of the applet. The minimum version of the basic library of the applet is 2.10.0.

Device Performance Requirements

Last updated : 2023-09-05 11:11:24

Network and Hardware Requirements

Device requirements for teachers

System requirements for teachers	Computers (we recommend teachers use a computer or interactive screen to teach classes)	Processor	Intel Core i5 with a clock rate of 2.0 GHz or above
		Operating system	PC: Windows 7 or later; Mac: OS X 10.10 or later
		Memory	4 GB RAM or above
		Display	1280x720 or above
		Network	4 Mbps or above for upstream/downstream
		Interactive screen	PC: 4-point touch or above; Mac: Not supported
	iPad	Recommended models	iPad (5th generation), iPad Air 2, iPad Pro or later: iPad Pro (9.7-inch): A1673, A1674, and A1675; iPad Pro (10.5-inch): A1701 and A1709; iPad Pro (11-inch): A1980, A1934, A1979, A1980, and A2013; iPad Pro (12.9-inch): A1584, A1652, A1876, A1895, A1983, A2014, A1670, A1671, and A1821; iPad (5th generation): A1822 and A1823; iPad (6th generation): A1893 and A1954

Device requirements for students

System requirements for students	Computers	Processor	PC: Intel Core i5 or later; Mac: Intel processor
		Operating system	PC: Windows 7 or later; Mac: OS X 10.10 or later
		Memory	PC: 2 GB RAM or above; Mac: 4 GB RAM or above

		Display	1280x720 or above
		Network	2 Mbps or above
	Apple mobile devices	System version	iOS 9.0 or later
		Hardware support	iPhone (6, 6s, 6s Plus, 7, 7 Plus, 8, 8 Plus, X, XR, and XS Max); iPad: iPad 5, mini 4, Air 2, and Pro, and newer iPad Pro models
		System version	Android 6.0 or later
		Memory	4 GB or above
		Recommended CPU models	(Qualcomm Snapdragon 6 series, MTK 8 series, and Kirin 9 series or later) Qualcomm Snapdragon 8 series: 821, 835, 845, 855, and 855 Plus; Qualcomm Snapdragon 7 series: 710 and 7306; Qualcomm Snapdragon 660; HUAWEI Kirin 9 series: 960, 970, 980, and 990; Samsung Exynos: 9810, 8895, and 8890; MediaTek: Helio X30 and P60
		Recommended Android phone models	Samsung Galaxy S7 edge, S7, and S8; HUAWEI Mate 9, HONOR 9, Mate 20 Pro, Nova 3e, Nova 5 Pro, and P30; OnePlus 3T and 5T; OPPO K3; vivo X21, X21A, NEX Dual Display (to enable the camera, only the rear screen can be used), X27, and iQOO; Mi 6, MIX 2, MIX 2s, and Redmi K20 Pro
		Recommended Android tablet models	HUAWEI M6/M5, HUAWEI Mate Pro, and Mi Pad 4

Note:

During the class, turn off other devices/services (such as TV and download services) connected to the network of the device as much as possible to ensure a smooth network for the class.

Network stability rankings:

Computer + wired network > iPad + 5G wireless network > computer + 5G wireless network > computer/iPad + 2.4G wireless network.

You can refer to the [network speed test address](#).