

Tencent Interactive Whiteboard

Version Information



Tencent Cloud

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Version Information

Android

Last updated: 2024-12-26 15:40:21

2.9.8.267 @ 2024.12.12

- [click Download SDK \(Standard, recommended\)](#)
- [click Download SDK \(2.9.8.262, excluding TBS, meets Google Store requirements\)](#)
- Initialization Parameters
 - New property added to TEduBoardInitParam: androidVideoFillMode, sets whether the video fills the screen.
 - New property added to TEduBoardInitParam: enableContainerViewAlpha, sets whether the whiteboard container view is transparent.
- Adapted for Android 14

2.9.5.258 @ 2023.1.31

- [click Download SDK \(Standard, recommended\)](#)
- [click Download SDK \(2.9.5.261, excluding TBS, meets Google Store requirements\)](#)
- Callback Event Changes
 - In the new transcoding scheme, Audio and Video now include the `currentTime` property during play/pause, indicating media playback progress.
- API changes
 - `playH5PPTVideo`, `pauseH5PPTVideo`, `playH5PPTAudio`, `pauseH5PPTAudio` APIs now support controlling Audio and Video playback in new transcoding scheme (CI) PPT, PPTX files.

Note:

Due to technical limitations, the new transcoded courseware can only achieve **all** play/pause of media (**does not distinguish between audio and video**) on the current page.

- Optimized experience
 - Image elements now support dragging beyond the whiteboard boundary.
- Fixes
 - In Group Mode, there is a probability of segment erasure failure.

- For the protractor teaching aid, setting 0° will display as 30° on the remote.

2.9.4.257 @ 2023.12.28

- [click Download SDK \(Standard, recommended\)](#)
- [click Download SDK \(2.9.4.259, excluding TBS, meets Google Store requirements\)](#)

- Initialization Parameters

Added `config.h5PPTDownGradeTimeoutTimes`, H5PPT resource load timeout times, default is 0, no downgrade processing; if it exceeds the default number of times, the SDK will actively give the `TEduBoard.EVENT.TEB_H5PPT_DOWN_GRADE` callback event, invoke `setDownGradeEnable` API, to determine downgrade settings. If downgraded, display as thumbnails of transcoded files.

- New interface

1.1 Automatic selection of geometric elements `autoSelectedElement`, used with `TEduBoard.EVENT.TEB_ADDELEMENT`, invoked when callback parameter `type == TEduBoard.TEduBoardElementType.TEDU_BOARD_ELEMENT_GEOMETRY`, the element will be automatically selected.

1.2 Set H5 PPT file downgrade rendering `setDownGradeEnable`.

- New callback event

1.3 New H5 PPT page downgrade rendering event notification: `TEduBoard.EVENT.TEB_H5PPT_DOWN_GRADE`, used with `setDownGradeEnable` interface to proceed with downgrade rendering settings.

- API changes

1.4 Add whiteboard API `addBoard` with new configuration attribute `index` to specify the page number for adding whiteboard.

1.5 H5 PPT internal multimedia resource playback status callback event `TEB_H5PPT_MEDIA_STATUS_CHANGED` adds a new return parameter `currentTime`, indicating H5PPT media playback progress.

- Others

1.6 mini programs webview version adds dot eraser feature.

1.7 mini programs other known bugs.

2.9.3.252 @ 2023.11.30

- [click Download SDK \(Standard, recommended\)](#)
- [click Download SDK \(2.9.3.258, without TBS, meets Google Store shelving requirements\)](#)

- New interface

1.1 Play H5 transcoded PPT current page video: `playH5PPTVideo`

1.2 Pause H5 transcoded PPT current page video: `pauseH5PPTVideo`

1.3 Play H5 transcoded PPT current page audio: `playH5PPTAudio`

1.4 Pause H5 transcoded PPT current page audio: `pauseH5PPTAudio`

- API changes

1.1 Get file information API `getFileInfo` : new field `pptMediaInfo` added in the return result, which contains the list of audio and video element IDs on the current page of the H5 transcoded PPT.

- Feature changes

1.1 Zoom and move tool: Now supports Alt key (Option Key on macOS) + Scroll Wheel for horizontal movement of the whiteboard. Complete usage instructions are as follows:

1.2 Rectangle Selection Tool: When moving/scaling elements, they will now stay within the whiteboard's range.

1.3 Text tool: When the text content is too long, input will be blocked, and the text content will not be automatically truncated at the end.

- Fixes

1.1 Zoom and move tool: On macOS, Shift + Scroll Wheel does not trigger scaling.

1.2 Zoom and move tool: Occasional occurrence of Shift + Scroll Wheel allows horizontal movement of the whiteboard.

2.9.2.249 @ 2023.10.30

- [click Download SDK \(Standard, recommended\)](#)

- [click Download SDK \(2.9.2.255, without TBS, meets Google Store shelving requirements\)](#)

- New interface

1.1 Add Cursor Position Setting Interface: `setCursorPosition` , can be used in scenarios where you want explicit cursor for local and remote while disabling mouse response.

1.2 API to set text tool line height: `setTextLineHeight` , supports passing in numbers. The created text box will use the set line height after setting.

- New callback event

1.1 New callback event: `TIW_RESET_DATA` , triggers when invoking the `reset` API.

- Interface Optimization

1.1 Modify element API: `updateElementById` now adds a new type `type` — `TEduElementOperatorType.ROTATION_ANGLE` , supports modification of element rotation angle. See Details in [API documentation](#) .

1.2 Add element interface: `addElement` now also supports setting the rotation angle for elements other than watermark elements `deg`.

1.3 Add Transcoding File Interface: `addTranscodeFile` now also supports adding **COS** transcoded PDF files.

- Fixes

1.1 **Show/Hide Element, Clear Whiteboard** then performing an undo operation will definitely cause the element to be displayed.

1.2 Setting **Image** or **H5 Background** and turning to other pages causes a large number of requests for background resources issue.

1.3 Error occurs in full-size screenshot when no courseware is added issue.

1.4 In drawing disabled state, clicking text elements sends active input events issue.

2.9.1.248 @ 2023.09.13

- [click Download SDK \(Standard, recommended\)](#)
- [click Download SDK \(2.9.1.254, without TBS, meets Google Store shelving requirements\)](#)
- Optimization

1.1 Optimize input performance of text tool in large text volume scenario.

2.9.0.247 @ 2023.08.22

- [click Download SDK \(Standard, recommended\)](#)
- [click Download SDK \(2.9.0.253, without TBS, meets Google Store shelving requirements\)](#)
- New Events

1.1 Add new drawing action state switching event `TEB_DRAW_STATUS_CHANGED`.

- Optimization

1.1 Fix the issue of modifying color in mathematical formulas not supported.

1.2 Fix the issue where custom graphics still display on the canvas when deleting a whiteboard.

1.3 Fix the issue where the free zoom drag icon appears when rotating custom elements.

2.8.9.246 @ 2023.07.21

- [click Download SDK \(Standard, recommended\)](#)
- [click Download SDK \(2.8.9.249, without TBS, meets Google Store shelving requirements\)](#)
- Initialization Parameters

1.1 Add `styleConfig.scrollbarThumbColor` parameter to set whiteboard scrollbar **slider** color.

1.2 Add `styleConfig.scrollbarTrackColor` parameter to set whiteboard scrollbar **slide rail** color.

- Optimized Processing

1.1 In the scenario of whiteboard auto zoom, the `TEB_BOARD_SCALE_CHANGE` event callback will now also be triggered.

2.8.8.244 @ 2023.06.26

- [click Download SDK](#)

- Update Events

1.1 The warning code for warning events adds

`TEDU_BOARD_WARNING_FILE_NOT_FOUND`. If the file to be operated on does not exist, this warning will be triggered.

1.2 The screenshot event (`TEduBoard.EVENT.TEB_SNAPSHOT`) adds the code field to indicate whether this screenshot is successful.

1.3 The H5 PPT loading status event adds

`TEDU_BOARD_H5_PPT_STATUS_IMAGE_ABNORMAL`. If the image resource inside the PPT fails to load, this status code will be triggered.

- Optimized Processing

1.1 Fixed the issue of discrepancies in the pause time points of video file play pause across all platforms.

2.8.7.241 @ 2023.05.23

- [click Download SDK](#)

- Add Initialization Parameters

1.1 Added H5 PPT `LoadTimeout` parameter to configure H5 PPT loading timeout time.

1.2 Added H5 PPT `ResourceTimeout` parameter to configure H5 PPT internal resource loading timeout time.

- New interface

1.1 Added element locking interface `lockElements`, supporting locking and unlocking of elements.

- New Events

1.1 Add element lock state change event `TEB_BOARD_ELEMENT_LOCKED_CHANGED`.

1.2 Add H5 PPT multimedia resource playback status

`TEB_H5PPT_MEDIA_STATUS_CHANGED`.

- Update Interface

1.1 Get Element Details Interface `getElementById` returned result adds a `locked` field, indicating whether the element is locked.

- Update Events

1.1 `TEB_GOTOBOARD` Page Turning Event adds a parameter to indicate the operator who triggered this page turning.

1.2 Warning event warning code adds `TEDU_BOARD_WARNING_ELEMENT_IS_LOCKED`, which will be triggered when performing delete, move, rotate, etc. operations on locked elements.

2.8.6.225 @ 2023.04.11

- [click Download SDK](#)

- New interface

1.1 snapshot interface adjusts the whiteboard screenshot area, supports specified parameters to set whether to capture the full-size whiteboard.

1.2 `importInLocalMode` interface supports undo and redo data export, allowing undo and redo operations after `exportInLocalMode`.

- Optimization

1.1 Repair the issue where a video file would automatically play on iPhone 6.

2.8.5.222 @ 2023.03.13

- [click Download SDK](#)

- New interface

1.1 Set Elements Display to show or hide elements.

- Update Interface

1.1 `exportInLocalMode` supports specifying element type/element ID, hidden elements, etc. during export.

1.2 `importInLocalMode` supports specifying element type/element ID, hidden elements, etc. during import.

1.3 `getBoardElementList` adds a second parameter, supporting the retrieval of hidden elements in the page.

- New Events

1.1. Element size, position change `TEB_BOARD_ELEMENT_POSITION_CHANGE` event, add status field to indicate the state of element start change, changing, and end change.

1.2. Alarm code `TEduBoardWarningCode` adds `TEDU_BOARD_WARNING_EXPORTIMPORT_FILTERRULE_ILLEGAL`, `TEDU_BOARD_WARNING_ELEMENTTYPE_NOT_EXISTS`, `TEDU_BOARD_WARNING_ELEMENTID_NOT_EXISTS`.

2.8.4.220 @ 2023.03.01

- [click Download SDK](#)

- New interface

1.1 Get background image information `getBackgroundImage`.

- Update Interface
 - 1.1. setBackgroundImage, setBackgroundH5 interfaces support setting an empty string to clear the background.
 - 1.2. exportData interface renamed to exportInLocalMode.
 - 1.3. importData interface renamed to importInLocalMode.
 - 1.4. Support for setting the operational behavior after selecting elements (can configure whether to allow scaling, moving, rotating, scaling proportionally), initParams.authConfig.elementOperationAuthority.
- New Events
 - 1.1. importInLocalMode interface data import completion event onTEBImportInLocalModeCompleted.

2.8.3.219 @ 2023.01.12

- [click Download SDK](#)
- New interface
 - 1.1 New interface setBackgroundImageAngle for setting the background image angle.
- Update Interface
 - 1.1 addElementWatermark interface supports text watermark.
- Optimization
 - 1.1. Optimization of static transcoding courseware page turning effect.

2.8.2.228 @ 2022.12.23

- [click Download SDK](#)
- New interface
 - 1.1 Exporting data exportData.
 - 1.2 Importing data importData.

2.8.1.227 @ 2022.12.12

- [click Download SDK](#)
- New support
 - 1.1. addVideoFile interface supports carrying parameters in the URL for assisting business party URL authentication.
 - 1.2. addElement supports image watermark, with new type TEDU_BOARD_ELEMENT_WATERMARK in TEduBoardElementType.

2.8.0.216 @ 2022.11.16

- [click Download SDK](#)

- New permission system
 - 1.1. Enable permission verification `enablePermissionChecker`.
 - 1.2. Disable permission verification `disablePermissionChecker`.
 - 1.3. Permission change event `TEB_BOARD_PERMISSION_CHANGED`.
 - 1.4. No operation permission event `TEB_BOARD_PERMISSION_DENIED`.

2.7.9.204 @ 2022.10.19

- [click Download SDK](#)
- New interface
 - 1.1 Whether to display local graffiti `enableShowGraffiti`.
- Update Interface
 - 1.1 `addElement` Update Element's new input parameter type to `TEDU_BOARD_ELEMENT_AUDIO`, `TEDU_BOARD_ELEMENT_GLOBAL_AUDIO`, allows setting the element title.
 - 1.2 `getElementById` When getting element data, a new field 'title' was added.
- New features
 - 1.1 Remote synchronization of educational tool element operation display screen.
- Bug and feature optimizations
 - 1.1 PPT Transcoding operation feature optimization.
 - 1.2 Handling of other known issues.

2.7.8.203 @ 2022.09.20

- [click Download SDK](#)
- New interface
 - 1.1 Enable multi-touch `enableMultiTouch`.
 - 1.2 Setting the modified signaling synchronization frequency, the allowed range is `[5, 20]`, element style `setSyncFps`.
- Update Interface
 - 1.1 `updateElementById` Update the element, a new position offset type `TEduElementOperatorType.CHANGE_POSITION` was added.
 - 1.2 `setToolType` Interface added new type: coordinate system `TEDU_BOARD_TOOL_TYPE_COORDINATE`.
- Bug and optimization handling
 - 1.1 Optimize compass operation.
 - 1.2 Graphic fitting optimization.
 - 1.3 Other known issues optimization.

2.7.7.194 @ 2022.08.31

- [click Download SDK](#)
- New interface
 - 1.1 Enable single instance mode `setSingleMode`, enabled by default (when creating the second whiteboard instance, the SDK will automatically recycle the old instance), set to `false` to allow multiple instances.
 - 1.2 Get element information `getElementById`.
 - 1.3 Set element style `updateElementById`.
 - 1.4 Set highlighter color, brush color for all highlighter drawings `setHighlighterColor`.
 - 1.5 Get highlighter color `getHighlighterColor`.
 - 1.6 Enable automatic graphic fitting during graffiti drawing `enablePenAutoFit`.
 - 1.7 Set graphic style `setGraphStyle`.
 - 1.8 Get graphic style `getGraphStyle`.
- Deprecated interface:
 - 1.1 Discard `setLineStyle`, please use `setGraphStyle`.
 - 1.2 Discard `getLineStyle`, please use `getGraphStyle`.
- New features
 - 1.1 Add mathematical teaching tool compass.
 - 1.2 Add new geometric figures (Right Triangle, Isosceles Triangle, Parallelogram, Cube, Cylinder, Cone).
 - 1.3 Other Features
- Bug fixes and optimization handling.
 - 1.1 PPT page turning optimization.
 - 1.2 Other known issues optimization.

2.7.6.186 @ 2022-08-16

- [click Download SDK](#)
- New features
 - 1.1 Add mathematical teaching aids feature, supporting Ruler, Triangle, and Protractor.
 - 1.2 Add new retrieval of PPT notes feature.

2.7.5.185 @ 2022-08-01

- [click Download SDK](#)
- New features

- 1.1 PPT old version transcoding, supports mp3 and mp4 playback synchronization.
- 1.2 PPT new version transcoding, supports mp3 and mp4 playback synchronization.
- 1.3 Add reporting for error and warning events.

- Bug and optimization handling

- 1.1 Fix the issue where Host lacks protocol when retrieving resources.
- 1.2 Other known issues have been fixed.

2.7.4.184 @ 2022-07-04

- [click Download SDK](#)

- Interface Adjustment

- 1.1 Courseware/Custom resource loading loadResource/loadCustomResource interface, add callback to return loading progress.

- Adjust Global Variables

- 1.1 Whiteboard error code adds
TEDU_BOARD_WARNING_IMAGE_MEDIA_BITRATE_TOO_LARGE for excessive
bitrate of multimedia resources.

- Bug Fix

- 1.1 Eraser does not erase cleanly during fast movement, causing omissions.
- 1.2 PPT transcoding issue, transcoded files are considered as pad by the system, only responding to slide turning, not click events.
- 1.3 Other known issues have been fixed.

2.7.3.177 @ 2022-06-07

- [click Download SDK](#)

- Adjust Initialization Parameters

- 1.1 Under Permission Configuration, add the customCursorIcon parameter: whether to customize mouse style, default false to display system built-in style. When true, custom mouse style needs to be based on the returned mouse position.

- Adjust Event

- 1.1 When customizing mouse style, coordinate position callback
(TEB_BOARD_CURSOR_POSITION), user customizes mouse style based on position.

- New interface

- 1.1 Whether to display local alias (setOwnerNickNameVisible), when set to false, pen part does not display own NickName.

- Optimize Historical Data Pull

- 1.1 First frame rendering only pulls active whiteboard historical data.

1.2 When users turn pages, the operator will pull, corresponding whiteboard page historical data, and broadcast to other users in the room.

- Bug Fix

1.1 Other known issues have been fixed.

2.7.2.165 @ 2022-04-07

- [click Download SDK](#)

- Interface Adjustment TEduBoardErrorCode adds an enumeration:

TEDU_BOARD_MAX_BOARD_LIMITED = 10 ///The number of whiteboard pages in a single classroom has reached the upper limit.

2.7.1.155 @ 2022-02-24

- [click Download SDK](#)

- New Class

1.1 TEduBoardResourceController supports resource preloading, loadResource: cache courseware resource package ; preloadFile: cache a single file.

- New interface

1.1 loadCustomResource loads custom resources.

- Interface Adjustment

1.1 setSyncVideoStatusEnable adds parameter isAppActiveChange: only needs to be called when switching between foreground and background on mobile devices.

2.6.9.145 @ 2021-12-31

- [click Download SDK](#)

- New interface

1.1 Support PPT courseware mute operation (soundMuteForPPT).

1.2 Courseware Resource Preloading, supports loading before and during class. For details, please refer to [Courseware Preloading Documentation](#) .

- Feature Optimization

1.1 Optimized Courseware Loading

1.2 The screenshot feature loses several pixels in abnormal dpr cases.

2.6.8.144 @ 2021.12.10

- [click Download SDK](#)

- New interface

1.1 gotoStep(boardId, step) Jump to Specified Animation Steps.

- 1.2 getBoardScroll() Get Whiteboard Scrolling Position.
- 1.3 setPiecewiseErasureEnable(enable) Whether to Enable Point Erase (Segmented Erasure) feature.
- 1.4 isPiecewiseErasureEnable() Get Segmented Erasure Mode On Status.
- 1.5 setEraserSize(radius) Set Eraser Size.
- 1.6 getEraserSize() Get Eraser Size.
- 1.7 setGlobalBackgroundPic(url, mode, type) Set Whiteboard Background Image.
- 1.8 getGlobalBackgroundPic() Get Whiteboard Background Image.
- Add new initialization parameter globalBackgroundPic.
- Adjust Interface
 - 1.1 addElement New Add Text Element TEDU_BOARD_ELEMENT_TEXT.
- New Events
 - 1.1 onTEBScrollChanged Whiteboard Move Callback.
- Adjust Event
 - 1.1 onTEBSelectElement ElementItem add boundingbox Attribute.

2.6.7.139 @ 2021.11.17

- [click Download SDK](#)
- Feature Optimization
 - 1.1 Optimize Whiteboard Log Module to Frequently Obtain Device Version Information.

2.6.7.137 @ 2021.10.29

- [click Download SDK](#)
- add interface
 - 1. Set Custom Font (setTextFontFamily).
 - 2. Add Custom Font (addTextFontFamily).
 - 3. Retrieve Current Font in use (getTextFontFamily).
- Adjust Initialization Parameters
 - 1. Whether to display the remote cursor in pen mode (remoteCursorVisible).
- Adjust Interface
 - 1. Set whether the remote pen is visible locally (setRemoteCursorVisible).
- Adjust global variables
 - 1. Whiteboard warning code (TEduBoardWarningCode), added a static PPT duplicate warning code.
- Feature Optimization
 - 1. Graffiti synchronization in weak network environment.

2. Optimize graffiti display effect.

- Bug Fix

1. Repair several known issues.

2.6.6.135 @ 2021.10.09

- [click Download SDK](#)

- New interface

- 1.1 Set whether the whiteboard scrollbar is visible (setScrollBarVisible).

- Interface Adjustment

- 1.1 addImagesFile(urls, title, needSwitch) supports title, needSwitch.

- 1.2 addH5File(url, title, needSwitch) supports title, needSwitch.

- 1.3 addVideoFile(url, title, needSwitch) supports title, needSwitch.

- Entity Class Adjustment

- 1.1 TEduBoardFileInfo, added a fileType field.

- Add Constants

- 1.1 TEduBoardFileType.

2.6.5.131 @ 2021.09.01

- [click Download SDK](#)

- New interface

- 1.1 Set output log level (setLogLevel).

- Adjust Global Variables

- 1.1 Geometric Element Type (TEduBoardMathGraphType).

- 1.2 Log Level (TEduBoardLogLevel).

- Deprecated interfaces and events in the current version

- 1.1 SDK interface: Initiate file transcoding request (applyFileTranscode).

- 1.2 Callback Event: Transcoding progress callback (TEB_TRANSCODEPROGRESS).

- 1.3 Global Constants: File Transcoding Status (TEduBoardFileTranscodeStatus).

- Feature Optimization

- 1.1 Add support for various geometric shapes in geometry drawing board.

- Bug Fix

- 1.1 Some known problems have been fixed.

2.6.4.126 @ 2021-08-16

- [click Download SDK](#)

- New interface
 - 1.1 Add whiteboard (addBoard), option to not jump to the newly added whiteboard.
 - 1.2 Group Mode feature
 - 1.2.1 Enable group mode (setClassGroupEnable)
 - 1.2.2 Set group (setClassGroup)
 - 1.2.3 Set group title (setClassGroupTitle)
 - 1.2.4 Reset all groups (resetClassGroup)
 - 1.2.5 Get all group IDs (getAllClassGroupIds)
 - 1.2.6 Get group mode status (getClassGroupEnable)
 - 1.2.7 Get the group where the user is located (getClassGroupIdByUserId)
 - 1.2.8 Acquire group information (getClassGroupInfoById)
 - 1.2.9 Remove whiteboard from group (removeBoardInClassGroup)
 - 1.2.10 Remove user from group (removeUserInClassGroup)
 - 1.2.11 Delete group (removeClassGroup)
 - 1.2.12 Add whiteboard to group (addBoardToClassGroup)
 - 1.2.13 Add user to group (addUserToClassGroup)
 - 1.2.14 Jump within group (gotoClassGroupBoard)

2.6.4.125 @ 2021.08.06

- [click Download SDK](#)
- New interface
 - 1.1 Set geometric shape type (setMathGraphType)
 - 1.2 Operation permissions in mouse mode (setMouseToolBehavior)
 - 1.3 Set whiteboard remark information (setBoardRemark)
 - 1.4 Get whiteboard remark information (getBoardRemark)
 - 1.5 Add function element API (addElement)
- Add Initialization Parameters
 - 1.1 Operation permissions in mouse mode (mouseToolBehavior)
 - 1.2 Enable formula element support (formulaEnable)
- Feature Optimization
 - 1.1 Add support for various geometric shapes in geometry drawing board.
 - 1.2 Add support for new formula elements.
 - 1.3 Optimize video loading and playback logic.
 - 1.4 Real-time synchronization display of graphic graffiti drawing.

- 1.5 Optimize PPT resource loading retry logic.
- 1.6 Add local cache to improve resource loading speed.
- Bug Fix
 - 1.1 Scroll bar jitter when interactive whiteboard width and height change.
 - 1.2 Reset remote PPT animation steps when deleting files.
 - 1.3 Remote graphic display error when custom graphic height is 0.
 - 1.4 Several known issues fixed

2.6.3.113 @ 2021.07.04

- [click Download SDK](#)
- New interface
 - 1.1 Set pen automatic fitting mode (setPenAutoFittingMode).
 - 1.2 Generate Whiteboard Image (addSnapshotMark)
- Interface Adjustment
 - 1.1 Add whiteboard (addBoard) supports setting the background H5 directly for new whiteboards
- Add Initialization Parameters
 - 1.1 Whiteboard offline alarm time interval (offlineWarningTimeout)
- New Events
 - 1.1 Whiteboard offline alarm (TEB_OFFLINE_WARNING)
- Adjust Event
 - 1.1 Add element callback (TEB_ADDELEMENT) Add element callback return value added new element type type
- Optimization
 - 1.1 Magic pen feature
 - 1.2 Supports directly creating H5 background whiteboards
 - 1.3 Supports whiteboard offline detection
- bug fix
 - 1.1 Several known issues

2.6.2.106 @ 2021.06.14

- [click Download SDK](#)
- Interface Adjustment
 - 1.1 addElementMathCanvas (Add mathematical function canvas)
 - 1.2 addElementFunctionGrapher (Add mathematical function image)

- Adjust Initialization Parameters
 - 1.1 TEduBoardInitParam added mathGraphEnable (whether to preload mathematical function tool library)
- New Events
 - 1.1 onTEBSelectElement (Callback for the selection made by the selection tool)
 - 1.2 onTEBMathGraphEvent (Event for Mathematical Functions Image Tool)
 - 1.3 onTEBZoomDragStatus (Remote Whiteboard Zoom Drag Status Callback)
- Abolish Interface
 - 1.1 addImageElement (Add Image Element)
- Optimization
 - 1.1 Support Mathematical Image Display
 - 1.2 Support movement, zoom, and rotation of HTML5 elements.
 - 1.3 Add Element supports custom position, support for Image Element, HTML5 Element, and Mathematical Functions Image.
 - 1.4 The mobile version supports two-finger zooming of the whiteboard under any tool.
- Bug Fix 1. Several known issues

2.6.1.100 @ 2021.06.03

- [click Download SDK](#)
- Interface Adjustment
 - 1.1 setToolTypeTitle (Set the tool's Prompt Message)
 - 1.2 setAccessibleUsers (Set which users' Graphics are allowed to operate)
- Initialization Parameters:
Optimization of Parameter Structure
- New interface:
 - 1.1 Text Component Status Callback (onTEBTextElementStatusChange)
 - 1.2 Image element loading status (onTEBImageElementStatusChanged)
 - 1.3 Whiteboard text tool exception warning (onTEBTextElementWarning)

2.6.0.94 @ 2021.05.08

- [click Download SDK](#)
- Key features:
 - 1.1 Support for the latest transcoding schemes. For details, please refer to [new document transcoding](#).
- New interface:

- 1.1 Added [set the number of layers for single erasure (setEraseLayerLimit)].
- 1.2 Added [limit data types erasable by the eraser (setEraseLayerType)].
- Optimization:
 - 1.1 Doodling performance optimization.
 - 1.2 Laser pen movement performance optimization.
 - 1.3 Laser pen multi-end synchronization effect optimization.
 - 1.4 PPT and image element loading.
 - 1.5 Error in the selection range when doodling exceeds the whiteboard area.
 - 1.6 Optimization of rearrangement and redraw operations during whiteboard rendering.
- Bug fixes:
 - 1.1 Text elements are occluded by iframe elements when taking screenshots.
 - 1.2 Straight line collision detection calculation error.
 - 1.3 Several other known issues.

2.5.7.86 @ 2021.02.04

- [click Download SDK](#)
- New interface:
 - 1.1 Add mobile whiteboard interface (setScaleAnchor)
 - 1.2 Add interface to display remote cursor during drawing (setRemoteCursorVisible)
 - 1.3 Audio Element – Set Volume Level (setAudioVolume)
 - 1.4 Audio Element – Retrieve Volume Level (getAudioVolume)
 - 1.5 Add the scale ratio setting for the zoom tool (setScaleToolRatio)
 - 1.6 Add primary and backup domain name mapping for resources (addBackupDomain)
 - 1.7 Remove primary and backup domain name mapping for resources (removeBackupDomain)
- New Events:
 - 1.1 Remove element event
- New initialization parameters:
 - 1.1 Add initialization parameters to disable the scaling feature of the mobile tool (enableScaleTool).
- Optimization:
 - 1.1 Add support for specifying primary and backup URLs for resources such as H5PPT, image elements (imageElement)/image files (imagesFile), background images, and videos. Requires the addition of a backup domain interface.
 - 1.2 Optimization of static PPT page turning interaction effects.

1.3 Whole Point Selection Box Style.

1.4 Performance optimization and bug fixes for the laser pen feature.

- Bug fixes:

1.1 Issue with incorrect scaling ratio after image rotation.

1.2 Missing vertical scrollbar in Chrome version 88.

1.3 Issue with exceptional scrolling triggered by the scrollbar.

1.4 Incorrect selection box range when adding custom elements.

1.5 Related issues with the Text Tool.

1.6 Several other known issues.

2.5.6.85 @ 2020.12.14

- [click Download SDK](#)

- New interface:

- Added interface to enable or disable the native system cursor `setSystemCursorEnable`.

- After enabling this feature, the Brush Icon and Laser Pointer Icon will use the system's cursor style, providing a slight smoothness improvement locally.

- After enabling this feature, there will be a slight delay phenomenon with the Brush Icon and Doodling, which is normal.

- After enabling this feature, the cursor might revert to the default mouse pointer on the Mac Terminal under certain circumstances, such as message pop-ups, which is normal.

- Added interface for setting the prompts for the Brush and Laser Pointer tools `setToolTypeTitle`.

- Support for audio elements

- Added audio `addElement`.

- Play audio `playAudio`.

- Pause audio `pauseAudio`.

- Seek audio `seekAudio`.

- Enable or disable the audio control panel `enableAudioControl`.

- New features:

- Click and rectangle selection tools are merged.

- Laser pointer and brush support for multiple persons.

- Experience Optimization:

- Optimized selection accuracy for the selection tool and eraser.

2.5.5.83 @ 2020.12.03

- [click Download SDK](#)
- Bug Fix
 - Fixed WebView RD vulnerability.
 - Replaced log module to prevent memory leak.

2.5.5.71 @ 2020.11.09

- [click Download SDK](#)
- New features:
 - Added preset text content for the text tool using `setNextTextInput`.
 - Optimized whiteboard scaling tool to support mouse wheel zoom, focus zoom, and reduced interaction method with the shift key.
 - `TEduBoardToolType` includes a new custom graphic tool.
 - Added `addElement` interface to support adding custom graphic elements.
 - Added `onTEBAddElement` callback.
 - Scrollbar displayed after whiteboard enlargement.
- Bug Fix
 - Fixed occasional pen non-disappearance bug.

2.5.4.67 @ 2020.10.15

- [click Download SDK](#)
- Added tool type
 - Added perfect circle and square tool classes; also supports using the Ellipse Tool and Rectangle Tool to draw perfect circles and squares by pressing the Shift key.
- Optimization
 - Optimized the inaccuracy issue of the Eraser Erase Arrow Tool.
- Bug Fix
 - Fixed the synchronization issue when simultaneously moving image elements on multiple ends.
 - Fixed other known issues.

2.5.3.61 @ 2020.08.31

- [click Download SDK](#)
- Add Callback
 - Added video status callback `TEDU_BOARD_VIDEO_STATUS_WAITING` and `TEDU_BOARD_VIDEO_STATUS_PLAYING`.

- Bug Fix
 - Fixed the inconsistency issue of the laser pen display ratio on each end.
 - Fixed the occasional latency issue of whiteboard operations on the Mobile Terminal.
 - Fixed the micro-change issue of graffiti outside the whiteboard.
- Optimization
 - Continuous display during use of the desktop pen.
 - Callback on ERROR status after multiple video playback failures.
 - Related optimization of log reporting.

2.5.2.49 @ 2020.08.18

- [click Download SDK](#)
- WebView Version Update
 - Enforced use of System WebView for Android 10 and above.

2.5.2.48 @ 2020.08.07

- [click Download SDK](#)
- Add Callback
 - Added H5 PPT Status Callback onTEBH5PPTStatusChanged.

2.5.1.47 @ 2020.07.23

- [click Download SDK](#)
- Supported Features
 - Image elements support arbitrary angle rotation and eight-directional scaling.
- Interface Optimization
 - When you call the deleteFile interface to delete a non-current file, it will not redirect to the default file #DEFAULT.
- bug fix
 - Fixed the issue where the text tool input process caused invisible entered text in some input methods.
 - Fixed the issue where the keyboard would flash once when the mobile text tool is clicked at the whiteboard boundary position.
- API changes
 - Added the needSwitch parameter to the addTranscodeFile interface, indicating whether to switch to the added file after adding.

2.5.0.46 @ 2020.07.2

- [click Download SDK](#)
- Feature changes
 - addVideoFile/addTranscodeFile/addImagesFile interfaces return the file ID when adding existing files.
 - Unified video playback control bar interface across platforms.
- Supported Features
 - Supported PPT hyperlink click synchronization feature.
- bug fix
 - Fixed the issue where some Android phones could not display the video control bar when clicking on on-demand videos.
 - Fixed the issue where erasing graffiti during the graffiti process caused graffiti synchronization issues.
 - Fixed the issue where adding video files in specific scenarios resulted in additional redundant whiteboards.
- Performance Optimization

2.4.9.32 @ 2020.06.10

- [click Download SDK](#)
- New interface
 - Added whiteboard sync and refresh interface syncAndReload.
 - Added whiteboard snapshot interface snapshot.
- Add Callback
 - Added onTEBSnapshot callback.
- Added error code
 - TEDU_BOARD_ERROR_PATH_INVALID Invalid Path.
 - TEDU_BOARD_ERROR_WRITE_ERROR File Writing Error.
- Bug Fix
 - Fixed the issue where frequent video operations caused permission disorder.
 - Resolved the issue where clicking the text tool at the bottom resulted in invalid input.
 - Fixed occasional residual issues when clearing.

2.4.8.31 @ 2020.05.21

- [click Download SDK](#)
- New interface
 - Added refresh interface to refresh the current whiteboard.

- Add Callback
 - TEduBoardImageStatus added TEDU_BOARD_IMAGE_STATUS_READ_ERROR.
 - Added refresh callback onTEBRefresh.
- Feature Optimization
 - Video file URL supports carrying signature information.
 - Optimized checkbox feature, allowing movement by clicking inside the box.
- Bug Fix
 - Fixed the issue where switching video caused progress errors.
 - Fixed laser pointer flickering issue.
 - Fixed laser pointer jumping issue.

2.4.7.25 @ 2020.04.30

- [Click to download SDK](#)
- Optimized experience
 - Smoothness optimization of doodling on the receiving end.
- Bug Fix
 - Fixed an issue where resetting data caused the initial state to be incorrect.

2.4.6.20 @ 2020.04.02

- [click Download SDK](#)
- Add Callback
 - Added three status callbacks for TEduBoardImageStatus.
 - TEDU_BOARD_IMAGE_STATUS_LOAD_ABORT Image loading interrupted.
 - TEDU_BOARD_IMAGE_STATUS_LOAD_TIMEOUT Image loading timeout.
 - TEDU_BOARD_IMAGE_STATUS_LOAD_CANCEL Image loading canceled.
 - onTEBRectSelected Callback for the selection made by the selection tool.
- New interface
 - TEduBoardInitParam adds two Parameters.
 - progressEnable Enable Loading Icon.
 - progressBarUrl Customize Loading Icon.
 - imageTimeout Image Loading Timeout.
- Bug Fix
 - Fixed the issue where loading the same image did not trigger a callback.

2.4.4.14 @ 2020.03.14

- Bug Fix
 - Fix the problem of Automatic Playback on the student side when playing video in the Whiteboard.
 - When Batch Import Image Group, limit the URL String Length to 7K; if it exceeds, return an Empty String and simultaneously Callback Error TEDU_BOARD_ERROR_DATA_TOO_LARGE.
 - Remove the redundant callback for onGotoBoard. In one PPT slide having multiple steps, only callback at the final or first step.

2.4.4.12 @ 2020.03.09

- Replace the Internal mp4 Player with videojs
- New interface
 - addImagesFile Batch Import Images to the Whiteboard.
 - setHandwritingEnable Enable or disable Brush Stroke Function.
 - isHandwritingEnable Check whether the brush stroke function is enabled on the whiteboard.
 - unInit Deinitialize Whiteboard
- Add Callback
 - onTEBAddImagesFile Callback for adding a batch of image files.
- Parameter modification
 - Default value of smoothLevel in TEduBoardInitParam changed to 0.
- Enumeration modification
 - New value added to TEduBoardErrorCode: TEDU_BOARD_ERROR_AUTH_TIMEOUT Service Authentication Timeout, please make sure to handle this error.
 - New value added to TEduBoardWarningCode: TEDU_BOARD_WARNING_IMAGESFILE_ALREADY_EXISTS.
 - TEDU_BOARD_VIDEO_STATUS_PLAYING changed to TEDU_BOARD_VIDEO_STATUS_TIMEUPDATE.

2.4.1.1 @ 2020.01.08

- Callback modification
 - onTEBFileUploadProgress callback parameter fileId changed to path.
 - onTEBFileUploadStatus callback parameter fileId changed to path.
- API changes
 - addImageElement Add Local Image supported.
- Added interface

- Added image element callback onTEBAddImageElement.

2.4.0.286 @ 2019.12.26

- Added interface supporting the video playback feature
 - Add video file String AddVideoFile(String url).
 - Show or hide video control bar void ShowVideoControl(boolean show).
 - Play video void PlayVideo().
 - Pause video void PauseVideo().
 - Seek video void SeekVideo(double time).
 - Enable syncing local video operation to remote void SetSyncVideoStatusEnable(boolean enable).
 - Periodic sync of video status to remote void StartSyncVideoStatus(int interval).
 - Stop syncing video status void StopSyncVideoStatus().
- Added interface supporting HTML5 page display feature
 - Add HTML5 page String AddH5File(String url).
- Added interface supporting image element feature
 - Add image resource void AddImageElement(String url).

2.3.7.255 @ 2019.11.21

- Added setAccessibleUsers interface to allow specific users to draw graphics.
- Added clearBackground interface to delete selected doodling.
- Added setCursorIcon interface to customize the mouse style.

2.3.6.242 @ 2019.11.14

- Added client-side transcoding interface (PPT, PDF, Word file transcoding applyFileTranscode).
- Added client-side transcoding callback (onTEBFileTranscodeProgress).
- Deleted the interface for adding normal and H5 files (AddFile, AddH5PPTFile).

2.3.5.227 @ 2019.10.30

- Added callback interface for the number of steps to jump to the whiteboard page (onTEBGotoStep).
- Added interface to get thumbnail images for specified files (getThumbnailImages).
- Fixed the issue causing crashes during whiteboard zoom.
- Fixed the issue of precision loss and image misalignment on all terminals after the whiteboard is enlarged.

2.3.4.192 @ 2019.09.25

- Graffiti shield multi-touch.
- Passthrough for PPT click events.
- Mobile terminal PPT page turning interaction supports swipe left/right to turn pages.

2.3.3.135 @ 2019.08.19

1. Whiteboard

- Supports large rooms with more than 1000 people and low-latency video.

2.3.2.125 @ 2019.08.07

1. Whiteboard

- The straight line tool supports dashed lines and arrow styles.
- Ellipse tool supports drawing with a fixed start point or center point.
- Add the addTranscodeFile interface for displaying transcoding files.
- Remove the interface for setting fonts.

2.3.1.118 @ 2019.08.01

1. Whiteboard

- Fix inaccurate text box selection issue.
- Add built-in fonts to ensure consistent font usage across all platforms for the text input feature.
- Add mouse styles for each tool.
- Laser pointer interaction optimization.
- Add protection logic to prohibit calling whiteboard interface operations before loading historical data is complete.

2.3.0.109 @ 2019.07.18

1. Whiteboard

- First screen rendering optimization.
- Support drawing on the whiteboard before drawing in.
- Add failure retry logic for loading ppt css and js.

2.2.2.99 @ 2019.06.30

1. Whiteboard

- AddFile interface synchronous return FileID.

- onTEBFileUploadProgress callback interface returns FileID and progress percentage.
- onTEBFileUploadStatus callback interface returns FileID and error code.

2.2.0 @ 2019.06.20

1. Whiteboard

- Support whether to reset steps when jumping pages on the whiteboard.
- Support obtaining file information for a specified file id.
- Added error codes to TEduBoardErrorCode.
- TEDU_BOARD_ERROR_TIM_HISTORYDATA Synchronize historical data failed.
- TEDU_BOARD_ERROR_RUNTIME Whiteboard runtime error.

2.1.0 @ 2019.05.29

1. Whiteboard

- Support image preloading feature;
- Support whether to synchronize graffiti data to other end feature.
- Optimize graffiti stroke anti-aliasing to make lines smoother.
- Optimize eraser tool to support swipe erasure.
- Optimize H5 PPT error prompt, issue a warning when the H5 PPT file already exists.
- Optimize document display to support independently setting the whiteboard aspect ratio and support swipe zooming.

2.0.0.2 @ 2019.05.22

1. Whiteboard

- Fixed bugs.

2.0.0.1 @ 2019.05.15

1. New feature support:

- Whiteboard
 - Added feature to use a webpage as whiteboard background.
 - New tool mouse feature to facilitate gesture page turning.

2. Fixes

- Corrected the way the whiteboard is constructed in the demo, moved to TIC SDK for unified initialization and deinitialization.

2.0.0_RC3 @ 2019.05.10

1. New feature support:

- Whiteboard
 - Support setting text style and font attributes.
 - Initialization interface supports passing all attribute initial values.
 - Initialization supports setting whiteboard aspect ratio.
 - `AddFile` interface supports passing COS transcoding URL.

2. Fixes

- Demo dependencies IM version specified as 4.3.81, fixes the compilation exception issue caused by the latest IM modification interface.

2.0.0_RC2 @ 2019.05.08

1. New feature support:

- Whiteboard
 - PPT animation display

2. New service:

- PPT animation transcoding service

2.0.0_RC1 @ 2019.04.26

1. New feature support:

- Audio and video communication
 - TRTC communication
 - Screen Sharing/Playback (can coexist with camera feed)
- IM
 - Message
 - Group
 - Relationship Chain Management
- Whiteboard
 - Doodling (pencil, eraser, laser pointer, line, hollow oval, hollow rectangle, solid oval, solid rectangle, text).
 - Background color, background image.
 - Click, box selection, mobile graffiti, undo, redo.
 - Whiteboard Zoom, Mobile.
 - File Display (Static: supports PPT, PDF, WORD, EXCEL), Multi-file Support.

iOS & macOS

Last updated: 2024-12-23 10:32:10

2.9.5.212 @ 2023.01.31

- [click to download SDK for iOS](#)
- [click to download SDK for macOS](#)
- Callback Event Changes
 - In the new transcoding scheme, Audio and Video now include the `currentTime` property during play/pause, indicating media playback progress.
- API changes
 - `playH5PPTVideo` , `pauseH5PPTVideo` , `playH5PPTAudio` , `pauseH5PPTAudio` APIs now support controlling Audio and Video playback in new transcoding scheme (CI) PPT, PPTX files.

Note:

Due to technical limitations, the new transcoded courseware can only achieve **all play/pause of media (does not distinguish between audio and video)** on the current page.

- Optimized experience
 - Image elements now support dragging beyond the whiteboard boundary.
- Fixes
 - In Group Mode, there is a probability of segment erasure failure.
 - For the protractor teaching aid, setting 0° will display as 30° on the remote.

2.9.4.210 @ 2023.12.28

- [click to download SDK for iOS](#)
- [click to download SDK for macOS](#)
- Initialization Parameters

Added `config.h5PPTDownGradeTimeoutTimes`, H5PPT resource load timeout times, default is 0, no downgrade processing; if it exceeds the default number of times, the SDK will actively give the `TEduBoard.EVENT.TEB_H5PPT_DOWN_GRADE` callback event, invoke `setDownGradeEnable` API, to determine downgrade settings. If downgraded, display as thumbnails of transcoded files.

- New interface

- 1.1 Automatic selection of geometric elements `autoSelectedElement`, used with `TEduBoard.EVENT.TEB_ADDELEMENT`, invoked when callback parameter `type == TEduBoard.TEduBoardElementType.TEDU_BOARD_ELEMENT_GEOMETRY`, the element will be automatically selected.
- 1.2 Set H5PPT file downgraded rendering `setDownGradeEnable`.
- New callback event
 - 1.3 Add H5PPT page downgraded rendering event notification: `TEduBoard.EVENT.TEB_H5PPT_DOWN_GRADE`, proceed with the `setDownGradeEnable` interface to configure downgraded rendering settings.
- API changes
 - 1.4 Add whiteboard API `addBoard` with new configuration attribute `index` to specify the page number for adding whiteboard.
 - 1.5 Internal multimedia resource playback status callback event in H5PPT `TEB_H5PPT_MEDIA_STATUS_CHANGED` adds a new return parameter `currentTime`, which indicates media playback progress in H5PPT.
- Others
 - 1.6 mini programs webview version adds dot eraser feature.
 - 1.7 mini programs other known bugs.

2.9.3.208 @ 2023.11.30

- [click to download SDK for iOS](#)
- [click to download SDK for macOS](#)
- New interface
 - 1.1 Play video of the current page of H5 transcoded PPT: `playH5PPTVideo`, due to WKWebView restrictions, iOS does not support playing more than two videos simultaneously.
 - 1.2 Pause H5 transcoded PPT current page video: `pauseH5PPTVideo`
 - 1.3 Play H5 transcoded PPT current page audio: `playH5PPTAudio`
 - 1.4 Suspend audio of the current page of H5 transcoded PPT: `pauseH5PPTAudio`
- API changes
 - 1.1 Get file information interface `getFileInfo`, added a new field `pptMediaInfo` in the return result, which contains a list of audio and video element IDs of the current page of H5 transcoded PPT.
- Feature changes

1.1 Zoom and move tool: Now supports Alt key (Option Key on macOS) + Scroll Wheel for horizontal movement of the whiteboard. Complete usage instructions are as follows:

终端类型	交互方式		效果
移动端	单指		移动
	双指		放大/缩小
PC/Mac/Web	鼠标左键点击	鼠标有移动	移动
		鼠标无移动	放大
		鼠标无移动 + Shift	缩小
	鼠标滚轮	滚动	移动
		滚动 + Alt	横向移动
		滚动 + Shift	放大/缩小

1.2 Rectangle Selection Tool: When moving/scaling elements, they will now stay within the whiteboard's range.

1.3 Text tool: When the text content exceeds the height limit, input will be blocked to prevent automatic truncation of the text content at the end.

- Fixes

1.1 Zoom and move tool: On macOS, Shift + Scroll Wheel does not trigger scaling.

1.2 Zoom and move tool: Occasional occurrence of Shift + Scroll Wheel allows horizontal movement of the whiteboard.

2.9.2.206 @ 2023.10.30

- [click to download SDK for iOS](#)
- [click to download SDK for macOS](#)
- New interface

1.1 Add Cursor Position Setting Interface: `setCursorPosition`, can be used in scenarios where you want explicit cursor for local and remote while disabling mouse response.

1.2 API to set text tool line height: `setTextLineHeight`, supports passing in numbers. The created text box will use the set line height after setting.

- New callback event

1.1 New callback event: `TIW_RESET_DATA`, triggers when invoking the `reset` API.

- Interface Optimization

1.1 Modify element interface: `updateElementById` now adds a new `type` — `TEduElementOperatorType.ROTATION_ANGLE`, which supports modifying the element's rotation angle. For details, refer to [API documentation](#).

1.2 Add element interface: `addElement` now also supports setting the rotation angle for elements other than watermark elements `deg`.

1.3 Add Transcoding File Interface: `addTranscodeFile` now also supports adding **COS transcoded PDF files**.

- Fixes

1.1 Show/Hide elements, after clearing the whiteboard and performing undo operation, elements will definitely be explicitly displayed.

1.2 Setting Image or H5 Background and turning to other pages causes a large number of requests for background resources issue.

1.3 Error occurs in full-size screenshot when no courseware is added issue.

1.4 In drawing disabled state, clicking text elements sends active input events issue.

2.9.1.205 @ 2023.09.13

- [click to download SDK for iOS](#)
- [click to download SDK for macOS](#)
- Optimization

1.1 Optimize input performance of text tool in large text volume scenario.

2.9.0.204 @ 2023.08.21

- [click to download SDK for iOS](#)
- [click to download SDK for macOS](#)
- New Events

1.1 Add new drawing action state switching event `TEB_DRAW_STATUS_CHANGED`.

- Optimization

1.1 Fix the issue of modifying color in mathematical formulas not supported.

1.2 Fix the issue where custom graphics still display on the canvas when deleting a whiteboard.

1.3 Fix the issue where the free zoom drag icon appears when rotating custom elements.

2.8.9.204 @ 2023.07.21

- [click to download SDK for iOS](#)
- [click to download SDK for macOS](#)
- Initialization Parameters

1.1 Add styleConfig.scrollbarThumbColor parameter to set whiteboard scrollbar **slider** color.

1.2 Add styleConfig.scrollbarTrackColor parameter to set whiteboard scrollbar **slide rail** color.

- Optimized Processing

1.1 In the scenario of whiteboard auto zoom, the TEB_BOARD_SCALE_CHANGE event callback will now also be triggered.

2.8.8.191 @ 2023.06.26

- [click to download SDK for iOS](#)

- [click to download SDK for macOS](#)

- Update Events

1.1 The warning code for warning events adds

TEDU_BOARD_WARNING_FILE_NOT_FOUND. If the file to be operated on does not exist, this warning will be triggered.

1.2 Added code field to the screenshot event (TEduBoard.EVENT.TEB_SNAPSHOT) to indicate whether the screenshot was successful.

1.3 The H5 PPT loading status event adds

TEDU_BOARD_H5_PPT_STATUS_IMAGE_ABNORMAL. If the image resource inside the PPT fails to load, this status code will be triggered.

- Optimized Processing

1.1 Fixed the issue of discrepancies in the pause time points of video file play pause across all platforms.

2.8.7.189 @ 2023.05.23

- [click to download SDK for iOS](#)

- [click to download SDK for macOS](#)

- Add Initialization Parameters

1.1 Added H5 PPT LoadTimeout parameter to configure H5 PPT loading timeout time.

1.2 Added H5 PPT ResourceTimeout parameter to configure H5 PPT internal resource loading timeout time.

- New interface

1.1 Added element locking interface lockElements, supporting locking and unlocking of elements.

- New Events

1.1 Add element lock state change event TEB_BOARD_ELEMENT_LOCKED_CHANGED.

1.2 Add H5 PPT multimedia resource playback status TEB_H5PPT_MEDIA_STATUS_CHANGED.

- Update Interface

1.1 Get Element Details Interface getElementById returned result adds a locked field, indicating whether the element is locked.

- Update Events

1.1 TEB_GOTOBOARD Page Turning Event adds a parameter to indicate the operator who triggered this page turning.

1.2 Warning event warning code adds TEDU_BOARD_WARNING_ELEMENT_IS_LOCKED, which will be triggered when performing delete, move, rotate, etc. operations on locked elements.

2.8.6.176 @ 2023.04.11

- [click to download SDK for iOS](#)

- [click to download SDK for macOS](#)

- New interface

1.1 snapshot interface adjusts the whiteboard screenshot area, supports specified parameters to set whether to capture the full-size whiteboard.

1.2 importInLocalMode interface supports undo and redo data export, allowing undo and redo operations after exportInLocalMode.

- Optimization

1.1 Fixed an issue where adding video files on iPhone 6 would automatically play.

2.8.5.175 @ 2023.03.14

- [click to download SDK for iOS](#)

- [click to download SDK for macOS](#)

- New interface

1.1 Set Elements Display to show or hide elements.

- Update Interface

1.1 exportInLocalMode supports specifying element type/element ID, hidden elements, etc. during export.

1.2 importInLocalMode supports specifying element type/element ID, hidden elements, etc. during import.

1.3 getBoardElementList adds a second parameter, supporting the retrieval of hidden elements in the page.

- New Events

1.1. Element size, position change TEB_BOARD_ELEMENT_POSITION_CHANGE event, add status field to indicate the state of element start change, changing, and end change.

1.2. Alarm code TEduBoardWarningCode adds TEDU_BOARD_WARNING_EXPORTIMPORT_FILTERRULE_ILLEGAL,

TEDU_BOARD_WARNING_ELEMENTTYPE_NOT_EXISTS,
TEDU_BOARD_WARNING_ELEMENTID_NOT_EXISTS.

2.8.4.174 @ 2023.03.01

- [click to download SDK for iOS](#)
- [click to download SDK for macOS](#)
- New interface
 - 1.1 Get background image information `getBackgroundImage`.
- Update Interface
 - 1.1 The `setBackgroundImage` and `setBackground` H5 interfaces support setting an empty string to clear the background.
 - 1.2. `exportData` interface renamed to `exportInLocalMode`.
 - 1.3. `importData` interface renamed to `importInLocalMode`.
 - 1.4. Support for setting the operational behavior after selecting elements (can configure whether to allow scaling, moving, rotating, scaling proportionally), `initParams.authConfig.elementOperationAuthority`.
- New Events
 - 1.1. `importInLocalMode` interface data import completion event `onTEBImportInLocalModeCompleted`.

2.8.3.172 @ 2023.01.12

- [click to download SDK for iOS](#)
- [click to download SDK for macOS](#)
- New interface
 - 1.1 New interface `setBackgroundImageAngle` for setting the background image angle.
- Update Interface
 - 1.1 `addElementWatermark` interface supports text watermark.
- Optimization
 - 1.1 Optimization of related enumeration naming.
 - 1.2 Optimization of the page-turning effect of static transcoded courseware.

2.8.2.180 @ 2022.12.23

- [click to download SDK for iOS](#)
- [click to download SDK for macOS](#)
- New interface
 - 1.1 Exporting data `exportData`.

1.2 Importing data importData.

2.8.1.176 @ 2022.12.12

- [click to download SDK for iOS](#)
- [click to download SDK for macOS](#)
- New support

1.1. The addVideoFile API supports carrying parameters in the URL for assisting business URL authentication.

1.2. addElement supports image watermark, with new type TEDU_BOARD_ELEMENT_WATERMARK in TEduBoardElementType.

2.8.0.170 @ 2022.11.16

- [click to download SDK for iOS](#)
 - [click to download SDK for macOS](#)
 - New permission system
- 1.1. Enable permission verification enablePermissionChecker.
- 1.2. Disable permission verification disablePermissionChecker.
- 1.3. Permission change event TEB_BOARD_PERMISSION_CHANGED.
- 1.4. No operation permission event TEB_BOARD_PERMISSION_DENIED.

2.7.9.153 @ 2022.10.19

- [click to download SDK for iOS](#)
 - [click to download SDK for macOS](#)
 - New interface
- 1.1 Whether to display local graffiti enableShowGraffiti.
- Update Interface
- 1.1 addElement Update Element's new input parameter type to TEDU_BOARD_ELEMENT_AUDIO, TEDU_BOARD_ELEMENT_GLOBAL_AUDIO, allows setting the element title.
- 1.2 getElementById When getting element data, a new field 'title' was added.- New features

1.1 Remote synchronization of educational tool element operation display screen.

 - Bug and optimization handling

1.1 PPT Transcoding operation feature optimization.

1.2 Handling of other known issues.

2.7.8.148 @ 2022.09.20

- [click to download SDK for iOS](#)
- [click to download SDK for macOS](#)
- New interface
 - 1.1 Enable multi-touch enableMultiTouch.
 - 1.2 Setting the modified signaling synchronization frequency, the allowed range is [5, 20], element style setSyncFps.
- Update Interface
 - 1.1 updateElementById Update the element, a new position offset type TEduElementOperatorType.CHANGE_POSITION was added.
 - 1.2 The setToolType API adds a type: coordinate system TEDU_BOARD_TOOL_TYPE_COORDINATE.
- Bug and optimization handling
 - 1.1 Optimize compass operation.
 - 1.2 Other known issues optimization.

2.7.7.144 @ 2022.08.31

- [Click to download SDK \(iOS\)](#)
- [Click to download SDK \(macOS\)](#)
- New interface
 - 1.1 Enable single instance mode setSingleMode, enabled by default (when creating the second whiteboard instance, the SDK will automatically recycle the old instance), set to false to allow multiple instances.
 - 1.2 Get element information getElementById.
 - 1.3 Set element style updateElementById.
 - 1.4 Set highlighter color, brush color for all highlighter drawings setHighlighterColor.
 - 1.5 Get highlighter color getHighlighterColor.
 - 1.6 Enable automatic graphic fitting during graffiti drawing enablePenAutoFit.
 - 1.7 Set graphic style setGraphStyle.
 - 1.8 Get graphic style getGraphStyle.
- Deprecated interface:
 - 1.1 Deprecated setLineStyle, please use setGraphStyle.
 - 1.2 Deprecated getLineStyle, please use getGraphStyle.
- New features
 - 1.1 Add mathematical teaching tool compass.

1.2 Add new geometric figures (Right Triangle, Isosceles Triangle, Parallelogram, Cube, Cylinder, Cone).

1.3 Other Features

- Bug and optimization handling

1.1 PPT page turning optimization.

1.2 Other known issues optimization.

2.7.6.137 @ 2022-08-16

- [Click to download SDK \(iOS\)](#)
- [Click to download SDK \(macOS\)](#)
- New features

1.1 Add mathematical teaching aids feature, supporting Ruler, Triangle, and Protractor.

1.2 Add new retrieval of PPT notes feature.

2.7.5.136 @ 2022-08-01

- [Click to download SDK \(iOS\)](#)
- [Click to download SDK \(macOS\)](#)
- New features

1.1 PPT old version transcoding, supports mp3 and mp4 playback synchronization.

1.2 PPT new version transcoding, supports mp3 and mp4 playback synchronization.

1.3 Increased reporting of errors and warning events;

- Bug and optimization handling

1.1 Fix the issue where Host lacks protocol when retrieving resources.

1.2 Other known issues have been fixed.

2.7.4.128 @ 2022-07-04

- [Click to download SDK \(iOS\)](#)
- [Click to download SDK \(macOS\)](#)
- Interface Adjustment

1.1 Courseware/Custom resource loading loadResource/loadCustomResource interface, add callback to return loading progress.

- Adjust Global Variables

1.1 Whiteboard error code adds

TEDU_BOARD_WARNING_IMAGE_MEDIA_BITRATE_TOO_LARGE for excessive bitrate of multimedia resources.

- Bug Fix
 - 1.1 Eraser does not erase cleanly during fast movement, causing omissions.
 - 1.2 PPT transcoding issue, transcoded files are considered as pad by the system, only responding to slide turning, not click events.
 - 1.3 Other known issues have been fixed.

2.7.3.120 @ 2022-06-10

- [Click to download SDK \(iOS\)](#)
- [Click to download SDK \(macOS\)](#)
- Adjust Initialization Parameters
 - 1.1 In the permission configuration, a new customCursorIcon parameter is added: whether to customize the mouse style. The default is false to display the system's built-in style. When true, you need to customize the mouse style based on the returned mouse position.
- Adjust Event
 - 1.1 When customizing the mouse style, coordinate position callback (TEB_BOARD_CURSOR_POSITION) for users to customize the mouse style according to the position.
- New interface
 - 1.1 Whether to locally display your alias (setOwnerNickNameVisible). When set to false, the brush part does not display your NickName.
- Optimize Historical Data Pull
 - 1.1 First frame rendering only pulls active whiteboard historical data.
 - 1.2 When users turn pages, the operator will pull, corresponding whiteboard page historical data, and broadcast to other users in the room.
- Bug Fix
 - 1.1 Other known issues have been fixed.

2.7.2.106 @ 2022-04-06

- [Click to download SDK \(iOS\)](#)
- [Click to download SDK \(macOS\)](#)
- Adjust Global Variables
 - 1.1 Whiteboard error code adds TEDU_BOARD_ERROR_MAX_BOARD_LIMITED, indicating that the number of whiteboard pages in a single class has reached the limit.
- Feature Optimization
 - 1.1 Whiteboard SDK upgrade.

1.2 Known issue handling and optimization.

2.7.1.101 @ 2022-03-15

- [Click to download SDK \(iOS\)](#)
- [Click to download SDK \(macOS\)](#)
- New Class

1.1 TEduBoardResourceController supports resource preloading. loadResource: caches courseware resource packages. preloadFile: caches a single file.

- New interface

1.1 loadCustomResource loads custom resources.

- Interface Adjustment

1.1 setSyncVideoStatusEnable adds a new parameter isAppActiveChange: this needs to be called only when switching the app to the foreground or background on mobile devices.

2.7.0.105 @ 2022-04-06

- [Click to download SDK \(iOS\)](#)
- [Click to download SDK \(macOS\)](#)
- Feature Optimization

1.1 Optimized iOS video playback pause/resume when switching between the foreground and background.

2.6.9.92 @ 2021-12-10

- [Click to download SDK \(iOS\)](#)
- [Click to download SDK \(macOS\)](#)
- New interface

1.1 Support PPT courseware mute operation (soundMuteForPPT).

1.2 Courseware Resource Preloading, supports loading before and during class. For details, please refer to [Courseware Preloading Documentation](#).

- Feature Optimization

1.1 Optimized courseware loading.

1.2 The screenshot feature loses several pixels in abnormal dpr cases.

2.6.8.87 @ 2021-12-10

- [Click to download SDK \(iOS\)](#)
- [Click to download SDK \(macOS\)](#)

- Added interfaces
 1. Jump to the specified animation step (gotoStep).
 2. Get whiteboard scroll position (getBoardScroll).
 3. Set whether to enable piecewise erasure mode (setPiecewiseErasureEnable).
 4. Get the status of piecewise erasure mode (isPiecewiseErasureEnable).
 5. Set eraser size (setEraserSize).
 6. Get eraser size (getEraserSize).
 7. Set global background image (setGlobalBackgroundPic).
 8. Get global background image (getGlobalBackgroundPic).
- Adjust Interface
 - 1.1 Added whiteboard element (addTextElement) to support adding text elements.
- New Events
 - 1.1 Whiteboard move callback (onTEBBoardScrollChanged).
- Adjust Event
 - 1.1 Callback for selection tool selected elements (onTEBSelectedElements) adds return fields such as element position, width and height, bounding box size, etc.
- Add Initialization Parameters
 - 1.1 Global background pic (globalBackgroundPic).
- Feature Optimization
 - 1.1 Optimized image resource loading logic.
 - 1.2 Added rotation correction for image elements on lower versions.
 - 1.3 Added support for custom size of image elements.
 - 1.4 Supports segmented erasing of drawn lines.
- Bug Fix
 - 1.1 Inconsistent display of whiteboard element sizes at different zoom ratios.
 - 1.2 Some known problems have been fixed.

2.6.7.84 @ 2021-11-04

- [Click to download SDK \(iOS\)](#)
- [Click to download SDK \(macOS\)](#)
- Bug Fix
 1. Inquiry pop-up appears in Mac SDK with lower version systems when loading whiteboard custom protocol.

2.6.7.82 @ 2021-10-29

- [Click to download SDK \(iOS\)](#)

- [Click to download SDK \(macOS\)](#)
- Add Interface
 1. Set Custom Fonts (setTextFontFamily).
 2. Add Custom Fonts (addTextFontFamily).
 3. Get Current Used Fonts (getTextFontFamily).
- Adjust Initialization Parameters
 1. Display or Not Remote Brush in Brush Mode (remoteCursorVisible).
- Adjust Interface
 1. Set whether remote brush is visible locally (setRemoteCursorVisible).
- Adjust Global Variables
 1. Whiteboard warning code (TEduBoardWarningCode), added static ppt duplicate warning code.
- Feature Optimization
 1. Graffiti synchronization in weak network environment.
 2. Optimize graffiti display effect.
- Bug Fix
 1. Repair several known issues.

2.6.6.78 @ 2021-10-12

- [Click to download SDK \(iOS\)](#)
- [Click to download SDK \(macOS\)](#)
- New interface
 - 1.1 Set Whiteboard Scrollbar Visibility (setScrollBarVisible).
- Interface Adjustment
 - 1.1 addImagesFile(urls, title, needSwitch) supports title, needSwitch.
 - 1.2 addH5File(url, title, needSwitch) supports title, needSwitch.
 - 1.3 addVideoFile(url, title, needSwitch) supports title, needSwitch.
- Entity Class Adjustment
 - 1.1 TEduBoardFileInfo, added a fileType field.

2.6.5.75 @ 2021-09-01

- [Click to download SDK \(iOS\)](#)
- [Click to download SDK \(macOS\)](#)
- New interface
 - 1.1 Set output log level (setLogLevel).
- Adjust Global Variables

1.1 Geometric Element Type (TEduBoardMathGraphType).

1.2 Log Level (TEduBoardLogLevel).

- Deprecated interfaces and events in the current version

1.1 SDK interface: Initiate file transcoding request (applyFileTranscode).

1.2 Callback Event: Transcoding progress callback (TEB_TRANSCODEPROGRESS).

1.3 Global Constants: File Transcoding Status (TEduBoardTranscodeFileStatus).

- Feature Optimization

1.1 Add support for various geometric shapes in geometry drawing board.

- Bug Fix

1.1 Some known problems have been fixed.

2.6.4.69 @ 2021-08-25

- [Click to download SDK \(iOS\)](#)
- [Click to download SDK \(macOS\)](#)

Bug Fix

Resolve the issue of interactive whiteboard loading H5 courseware exception.

2.6.4.61 @ 2021-08-16

- [Click to download SDK \(iOS\)](#)
- [Click to download SDK \(macOS\)](#)

- New interface

1.1 Add whiteboard (addBoard), can choose not to redirect to the newly added whiteboard.

1.2 Group Mode feature

1.2.1 Enable group mode (setClassGroupEnable).

1.2.2 Set group (setClassGroup).

1.2.3 Set group title (setClassGroupTitle).

1.2.4 Reset all groups (resetClassGroup).

1.2.5 Get all group IDs (getAllClassGroupIds).

1.2.6 Get group mode status (getClassGroupEnable).

1.2.7 Get the group where the user is located (getClassGroupIdByUserId).

1.2.8 Acquire group information (getClassGroupInfoByGroupId).

1.2.9 Remove whiteboard from group (removeBoardInClassGroup).

1.2.10 Remove user from group (removeUserInClassGroup).

1.2.11 Delete Group (removeClassGroup).

1.2.12 Add whiteboard to group (addBoardToClassGroup).

1.2.13 Add user to group (addUserToClassGroup).

1.2.14 Jump within Group (gotoClassGroupBoard).

2.6.4.57 @ 2021-08-06

- [Click to download SDK \(iOS\)](#)
- [Click to download SDK \(macOS\)](#)
- Add Interface
 1. Set geometric shape type (setMathGraphType), used for drawing geometric shapes on the geometric sketchpad.
 2. Operational permissions in mouse mode (setMouseToolBehavior).
 3. Set whiteboard remark information (setBoardRemark).
 4. Get whiteboard remark information (getBoardRemark).
- Add new initialization parameters
 1. Operational permissions in mouse mode (mouseToolBehavior).
 2. Enable formula element support (formulaEnable).
- Add New Element Type
 1. Formula elements (TEDU_BOARD_ELEMENT_FORMULA), this feature requires setting enable formula element support (formulaEnable) to true.
- Add Global Variable
 1. Geometric Element Type (TEduBoardMathGraphType).
- Feature Optimization
 1. Add multiple geometric shapes support to the geometric sketchpad.
 2. Add support for formula elements.
 3. Optimize video loading and playback logic.
 4. Real-time synchronization display of graphic graffiti drawing.
 5. Optimize PPT resource loading retry logic.
 6. Add local cache to improve resource loading speed.
- Bug Fix
 1. Scrollbar jitter when interactive whiteboard size changes.
 2. Remote PPT animation step reset when deleting file.
 3. Remote graphic display error when custom graphic height is 0.
 4. Several known issues fixed.

2.6.3.42 @ 2021-07-05

- [Click to download SDK \(iOS\)](#)
- [Click to download SDK \(macOS\)](#)
- Add Interface:
 1. Set pen automatic fitting mode (setPenAutoFittingMode).

2. Set background color of whiteboard parent container (setBoardContainerColor).
 3. Generate current whiteboard's blackboard content in the background (addSnapshotMark).
- Adjust Interface:
 1. Add whiteboard (addBoard), support directly setting background H5 for new whiteboard.
 - Add new initialization parameters:
 1. Whiteboard offline alarm time interval (offlineWarningTimeout).
 - New Event:
 1. Whiteboard offline alert (onTEBOfflineWarning).
 - Adjust Event:
 1. Add element callback (onTEBAddElement), added element type 'type' to return value.
 - Optimization:
 1. Magic Pen feature.
 2. Support directly creating H5 background whiteboard.
 3. Support whiteboard offline detection.
 4. Support generating blackboard notes.

2.6.2.41 @ 2021-06-30

- [Click to download SDK \(iOS\)](#)
- [Click to download SDK \(macOS\)](#)
- Adjust Interface
 1. Set tool prompt message (setToolTypeTitle).
 2. Set which users are allowed to draw graphics (setAccessibleUsers).
 3. Set user information (setUserInfo).
 4. Add whiteboard elements (addElement).
- Abolish Interface
 1. Abolish adding image elements (addImageElement), please use add whiteboard elements (addElement).
- Adjust Initialization Parameters:
 1. Optimize initialization parameter structure.
 2. Initialize permission parameters mathGraphEnable, preload mathematical function image library.
 3. Initialize configuration parameters scaleRange, whiteboard zoom range.
- New Event:
 1. Text component status callback (onTEBTextElementStatusChanged).
 2. Image element loading status (onTEBImageElementStatusChanged).
 3. Whiteboard text tool exception warning (onTEBTextElementWarning).

4. Box selection tool element selection callback (onTEBSelectedElements), original callback event (onTEBRectSelected) deprecated.
 5. Mathematical function image tool event callback (onTEBMathGraphEvent).
 6. Remote whiteboard zoom and move status callback (onTEBZoomDragStatus).
- Optimization:
 1. Doodling supports zooming and rotating.
 2. Text supports proportional scaling.
 3. Optimize user permission control.
 4. Support for displaying remote operation elements.
 5. Support for displaying whiteboard element operator or creator information.
 6. Automatically hide stationary remote brush.
 7. Optimize the display of background images in lower versions.
 8. Support for displaying mathematical function images.
 9. Support for H5 element movement, scaling, and rotation.
 10. Add elements that support custom positions, supporting image elements, H5 elements, and mathematical function images.
 11. Mobile supports whiteboard zooming with two fingers in any tool.
 - Bug Fix
 - Several known issues.
 - Optimization:
 - 1.1 Optimize doodling drawing performance.
 - 1.2 Optimize doodling rotation and movement performance.
 - 1.3 Laser pen movement performance optimization.
 - 1.4 Laser pen multi-end synchronization effect optimization.
 - 1.5 PPT and image element loading.
 - 1.6 Error in the selection range when doodling exceeds the whiteboard area.
 - 1.7 Optimization of rearrangement and redraw operations during whiteboard rendering.
 - Bug Fix
 - 1.1 Text elements are occluded by iframe elements when taking screenshots.
 - 1.2 Straight line collision detection calculation error.
 - 1.3 Several other known issues.

2.6.0.37 @ 2021-05-07

- [Click to download SDK \(iOS\)](#)
- [Click to download SDK \(macOS\)](#)
- Key features:
 - 1.1 Support the latest transcoding solution, please refer to [New File Transcoding](#).

- New interface
 - 1.1 Add an interface to limit the number of layers that the eraser can remove at one time (setEraseLayerLimit).
 - 1.2 Add an interface to limit the data types that the eraser can erase (setEraseLayerType).
 - 1.3 Add an interface to delete elements (removeElement).
- Add Initialization Parameters
 - 1.1 syncFps: Signal synchronization frequency.
- Optimization:
 - 1.1 Optimize doodling drawing performance.
 - 1.2 Optimize doodling rotation and movement performance.
 - 1.3 Laser pen movement performance optimization.
 - 1.4 Laser pen multi-end synchronization effect optimization.
 - 1.5 PPT and image element loading.
 - 1.6 Error in the selection range when doodling exceeds the whiteboard area.
 - 1.7 Optimization of rearrangement and redraw operations during whiteboard rendering.
- Bug Fix
 - 1.1 Text elements are occluded by iframe elements when taking screenshots.
 - 1.2 Straight line collision detection calculation error.
 - 1.3 Several other known issues.

2.5.7.34 @ 2021.02.02

- [Click to download SDK \(iOS\)](#)
- [Click to download SDK \(macOS\)](#)
- New interface:
 - 1.1 Add an interface to move the whiteboard (setScaleAnchor).
 - 1.2 Add an interface to display the remote brush during line drawing (setRemoteCursorVisible).
 - 1.3 Audio element – Set the volume level (setAudioVolume).
 - 1.4 Audio element – Get the volume level (getAudioVolume).
 - 1.5 Add an interface to set the scaling ratio of the scaling tool (setScaleToolRatio).
 - 1.6 Add an interface to add resource primary and backup domain mappings (addBackupDomain).
 - 1.7 Add an interface to delete resource primary and backup domain mappings (removeBackupDomain).
- New Events:

1.1 Delete element event onTEBRemoveElement.

1.1 Add element event onTEBAddElement.

- New initialization parameters:

1.1 Add initialization parameters to disable the scaling feature of the mobile tool (enableScaleTool).

- Optimization:

1.1 Add H5 PPT, image elements (imageElement)/image files (imagesFile), background images, videos, and other resources to support specifying primary and backup URLs. This requires the addition of the backup domain interface.

1.2 Optimization of static PPT page turning interaction effects.

1.3 Adjust the style of the selection box

1.4 Laser pen feature performance optimization

- Bug Fix

1.1 Incorrect zoom ratio after rotating the image

1.2 Missing vertical scroll bar in Chrome 88 version

1.3 Abnormal scrolling issue triggered by the scroll bar

1.4 Incorrect selection box range when adding custom elements

1.5 Text tool related issues

1.6 Several other known issues

1.7 Fix the issue where setToolTypeTitle diffraction setting is invalid

2.5.6.27 @ 2020.12.14

- [Click to download SDK \(iOS\)](#)

- [Click to download SDK \(macOS\)](#)

- New interface:

- Added interface to enable or disable native system cursor setSystemCursorEnable

- After enabling this feature, the Brush Icon and Laser Pointer Icon will use the system's cursor style, providing a slight smoothness improvement locally.

- After enabling this feature, there will be a slight delay phenomenon with the Brush Icon and Doodling, which is normal.

- After enabling this feature, the cursor might revert to the default mouse pointer on the Mac Terminal under certain circumstances, such as message pop-ups, which is normal.

- Added interface for setting the prompts for the Brush and Laser Pointer tools setToolTypeTitle.

- Support for audio elements
 - Added audio addElement.
 - Play audio playAudio.
 - Pause audio pauseAudio.
 - Seek audio seekAudio.
 - Enable or disable the audio control panel enableAudioControl.
- New features:
 - Click and rectangle selection tools are merged.
 - Laser pointer and brush support for multiple persons.
- Experience Optimization:
 - Optimized selection accuracy for the selection tool and eraser.

2.5.4.21 @ 2020.10.15

- [Click to download SDK \(iOS\)](#)
- [Click to download SDK \(macOS\)](#)
- Added tool type
 - Added perfect circle and square tool classes; also supports using the Ellipse Tool and Rectangle Tool to draw perfect circles and squares by pressing the Shift key.
- Optimization
 - Optimized the inaccuracy issue of the Eraser Erase Arrow Tool.
- Bug Fix
 - Fixed the synchronization issue when simultaneously moving image elements on multiple ends.
 - Fixed other known issues.

2.5.3.20 @ 2020.08.31

- [Click to download SDK \(iOS\)](#)
- [Click to download SDK \(macOS\)](#)
- Add Callback
 - Added video status callback TEDU_BOARD_VIDEO_STATUS_WAITING and TEDU_BOARD_VIDEO_STATUS_PLAYING.
- Bug Fix
 - Fixed the inconsistency issue of the laser pen display ratio on each end.
 - Fixed the occasional latency issue of whiteboard operations on the Mobile Terminal.
 - Fixed the micro-change issue of graffiti outside the whiteboard.

- Optimization
 - Continuous display during use of the desktop pen.
 - Callback on ERROR status after multiple video playback failures.
 - Optimized log reporting

2.5.2.10 @ 2020.08.07

- [Click to download SDK \(iOS\)](#)
- [Click to download SDK \(macOS\)](#)
- Add Callback
 - Added H5 PPT Status Callback onTEBH5PPTStatusChanged.

2.5.1.9 @ 2020.07.23

- [Click to download SDK \(iOS\)](#)
- [Click to download SDK \(macOS\)](#)
- Supported Features
 - Image elements support arbitrary angle rotation and eight-directional scaling.
- Interface Optimization
 - When you call the deleteFile interface to delete a non-current file, it will not redirect to the default file #DEFAULT.
- Bug fix
 - Fixed the issue where the text tool input process caused invisible entered text in some input methods.
 - Fixed the issue where the keyboard would flash once when the mobile text tool is clicked at the whiteboard boundary position.
- API changes
 - Added the needSwitch parameter to the addTranscodeFile interface, indicating whether to switch to the added file after adding.

2.5.0.8 @ 2020.07.2

- [Click to download SDK \(iOS\)](#)
- [Click to download SDK \(macOS\)](#)
- Feature changes
 - addVideoFile/addTranscodeFile/addImagesFile interfaces return the file ID when adding existing files.
 - Unified video playback control bar interface across platforms.

- Supported Features
 - Supported PPT hyperlink click synchronization feature.
- bug fix
 - Fixed the issue where erasing graffiti during the graffiti process caused graffiti synchronization issues.
 - Fixed the issue where adding video files in specific scenarios resulted in additional redundant whiteboards.
 - Fixed the issue where playing videos on iOS8 resulted in failure.
- Performance Optimization

2.4.9.7 @ 2020.06.10

- [Click to download SDK \(iOS\)](#)
- [Click to download SDK \(macOS\)](#)
- New interface
 - Added whiteboard sync and refresh interface syncAndReload.
 - Added whiteboard snapshot interface snapshot.
- Add Callback
 - Added onTEBSnapshot callback.
- Added error code
 - TEDU_BOARD_ERROR_PATH_INVALID Invalid Path.
 - TEDU_BOARD_ERROR_WRITE_ERROR File Writing Error.
- Bug Fix
 - Fixed the issue where frequent video operations caused permission disorder.
 - Resolved the issue where clicking the text tool at the bottom resulted in invalid input.
 - Fixed occasional residual issues when clearing.
 - iOS/Mac: Fixed the issue of no callback when initializing the whiteboard in case of disconnection.

2.4.8.5 @ 2020.05.21

- [Click to download SDK \(iOS\)](#)
- [Click to download SDK \(macOS\)](#)
- New interface
 - Added refresh interface to refresh the current whiteboard.
- Add Callback
 - TEduBoardImageStatus added TEDU_BOARD_IMAGE_STATUS_READ_ERROR.

- Added refresh callback onTEBRefresh.
- Feature Optimization
 - Video file URL supports carrying signature information.
 - Optimized checkbox feature, allowing movement by clicking inside the box.
- Bug Fix
 - Fixed the issue where switching video caused progress errors.
 - Fixed laser pointer flickering issue.
 - Fixed laser pointer jumping issue.

2.4.7.2 @ 2020.05.08

- [Click to download SDK \(iOS\)](#)
- [Click to download SDK \(macOS\)](#)
- Optimized experience
 - Smoothness optimization of doodling on the receiving end.
- Bug Fix
 - Fixed an issue where resetting data caused the initial state to be incorrect.

2.4.6.1 @ 2020.04.02

- [Click to download SDK \(iOS\)](#)
- [Click to download SDK \(macOS\)](#)
- Add Callback
 - Added three status callbacks for TEduBoardImageStatus.
 - TEDU_BOARD_IMAGE_STATUS_LOAD_ABORT Image loading interrupted.
 - TEDU_BOARD_IMAGE_STATUS_LOAD_TIMEOUT Image loading timeout.
 - TEDU_BOARD_IMAGE_STATUS_LOAD_CANCEL Image loading canceled.
 - onTEBRectSelected Callback for the selection made by the selection tool.
- New interface
 - TEduBoardInitParam adds two Parameters.
 - progressEnable Enable Loading Icon.
 - progressBarUrl Customize Loading Icon.
 - imageTimeout Image Loading Timeout.
- Bug Fix
 - Fixed the issue of no callback when loading the same image.
 - Fixed the issue where addTranscodeFile interface title escape error caused addition to fail.

2.4.4.2 @ 2020.03.14

- [Click to download SDK \(iOS\)](#)
- [Click to download SDK \(macOS\)](#)
- Bug Fix
 - Fix the problem of Automatic Playback on the student side when playing video in the Whiteboard.
 - When Batch Import Image Group, limit the URL String Length to 7K; if it exceeds, return an Empty String and simultaneously Callback Error TEDU_BOARD_ERROR_DATA_TOO_LARGE.
 - Remove the redundant callback for onGotoBoard. In one PPT slide having multiple steps, only callback at the final or first step.

2.4.4.1 @ 2020.03.09

- [Click to download SDK \(iOS\)](#)
- [Click to download SDK \(macOS\)](#)
- Replaced the internal MP4 player with videojs.
- New interface
 - addImagesFile Batch Import Images to the Whiteboard.
 - setHandwritingEnable Enable or disable Brush Stroke Function.
 - isHandwritingEnable Check whether the brush stroke function is enabled on the whiteboard.
 - unInit: Uninitialize the whiteboard.
- Add Callback
 - onTEBAddImagesFile Callback for adding a batch of image files.
- Parameter modification
 - Default value of smoothLevel in TEduBoardInitParam changed to 0.
- Enumeration modification
 - New value added to TEduBoardErrorCode: TEDU_BOARD_ERROR_AUTH_TIMEOUT Service Authentication Timeout, please make sure to handle this error.
 - New value added to TEduBoardWarningCode: TEDU_BOARD_WARNING_IMAGESFILE_ALREADY_EXISTS.
 - TEDU_BOARD_VIDEO_STATUS_PLAYING changed to TEDU_BOARD_VIDEO_STATUS_TIMEUPDATE.

2.4.1.2 @ 2020.02.19

- [Click to download the SDK \(iOS\)](#)
- [Click to download the SDK \(macOS\)](#)
- Internal log optimization

2.4.1.1 @ 2020.01.08

- [Click to download the SDK \(iOS\)](#)
- [Click to download the SDK \(macOS\)](#)
- Callback modification
 - onTEBFileUploadProgress callback parameter field changed to path.
 - onTEBFileUploadStatus callback parameter field changed to path.
- API changes
 - addImageElement Add Local Image supported.
- Added interface
 - Added image element callback onTEBAddImageElement.

2.4.0 @ 2019.12.06

Notice: Version 2.4.0 or below must use IM version 4.5.11 or below, otherwise, it may result in the failure to synchronize messages on the whiteboard.

- Added interface supporting the video playback feature
 - Add video file – (NSString *)addVideoFile:(NSString *)url.
 - Show or hide video control bar – (void)showVideoControl:(BOOL)show.
 - Play video – (void)playVideo.
 - Pause video – (void)pauseVideo.
 - Seek video – (void)seekVideo:(CGFloat)time.
 - Synchronize local video operation to remote – (void)setSyncVideoStatusEnable:(BOOL)enable.
 - Schedule video status synchronization to remote – (void)startSyncVideoStatus:(NSInteger)interval.
 - Stop video status synchronization – (void)stopSyncVideoStatus.
- Added interface supporting HTML5 page display feature
 - Add H5 page – (NSString *)addH5File:(NSString *)url.
- Added interface supporting image element feature
 - Add image resource – (void)addImageElement:(NSString *)url.

2.3.7 @ 2019.11.21

- Added interface
 - `setAccessibleUsers` to allow specific users to draw graphics.
 - `clearBackground:andSelected` to delete selected graffiti.
 - `setCursorIcon:cursorIcon` for custom mouse style.

2.3.6 @ 2019.11.18

- Delete interface
 - `-(NSString *)addFile:(NSString *)path`
 - `-(NSString *)addH5PPTFile:(NSString *)url`
- Delete Callback
 - `-(void)onTEBAddFile:(NSString *)fileId`
 - `-(void)onTEBAddH5PPTFile:(NSString *)fileId`
- Added interface
 - `-(void)switchFile:(NSString *)fileId boardId:(NSString *)boardId stepIndex:(NSInteger)stepIndex`
 - `-(void)applyFileTranscode:(NSString *)path config:(TEduBoardTranscodeConfig *)config`
 - `-(void)getFileTranscodeProgress:(NSString *)taskId`
- Add Callback
 - `-(void)onTEBFileTranscodeProgress:(TEduBoardTranscodeFileResult *)result path:(NSString *)path errorCode:(NSString *)errorCode errorMsg:(NSString *)errorMsg`

2.3.5 @ 2019.10.30

- Add interface `getThumbnailImages` to retrieve file thumbnails.
- Add step callback `onTEBGotoStep`
- Fix the issue of graffiti ineffectiveness when the whiteboard is zoomed to a certain ratio.
- Fixed the issue of precision loss and image misalignment on all terminals after the whiteboard is enlarged.

2.3.4 @ 2019.09.25

- Graffiti shield multi-touch.
- Passthrough for PPT click events.
- Mobile terminal PPT page turning interaction supports swipe left/right to turn pages.

2.3.3 @ 2019.08.19

- Added interface

- (uint64_t)getSyncTime supports large room scheme to get time synchronization timestamp.
- (void)syncRemoteTime:(NSString *)userId timestamp:(uint64_t)timestamp to set remote timestamp.
- bug fix
 - Fix the issue of getFileInfo returning errors.

2.3.2 @ 2019.08.07

- Deprecated Interface
 - addFile
 - addH5PPTFile
 - setTextFamily
 - getTextFamily
 - TEduBoardAuthParam.textFamily
- Deprecated Callback
 - onTEBAddFile
 - onTEBAddH5PPTFile
- Added interface
 - addTranscodeFile to add transcoding file.
 - setLineStyle to set straight line style (dashed line/arrow).
 - getLineStyle to get straight line style.
 - setOvalDrawMode to set ellipse drawing mode.
 - getOvalDrawMode to get ellipse drawing mode.
- Add Callback
 - onTEBAddTranscodeFile to add transcoding file callback.

2.3.1 @ 2019.08.01

- Laser pointer optimization
- Fix the screen flicker issue of background image whiteboard graffiti on iOS8.
- Fix the switch zoom issue of background image and H5 background on iOS8.
- Add HTML resource loading retry logic.

2.3.0 @ 2019.07.18

Performance Optimization

- First Screen Rendering Optimization

2.2.2 @ 2019.07.04

API Modification

- addFile/addH5PPTFile returns file Id.
- Modify onTEBFileUploadProgress/onTEBFileUploadStatus callback interface.

Feature Updates

- Support drawing on the whiteboard before drawing in.

2.2.1 @ 2019.06.21

Callback API Modification

- onTEBAddBoard callback boardId array.
- onTEBDeleteBoard callback boardId array.

2.2.0 @ 2019.06.20

New interface

- Supports whether to reset the step count when jumping between pages on the whiteboard
- Supports obtaining file information for a specified file id
- TEduBoardErrorCode adds error codes
 - TEDU_BOARD_ERROR_TIM_HISTORYDATA Failed to synchronize historical data
 - TEDU_BOARD_ERROR_RUNTIME Whiteboard runtime error

2.1.0 @ 2019.05.29

New features

- Support static PPT page preloading
- Ink optimization (pencil tool curve smoothing)
- Support data synchronization prohibition (do not sync local data to remote)
- Eraser tool supports swipe erasure
- Throw warning when the added H5PPT already exists
- Support setting the aspect ratio for each whiteboard independently
- Support whiteboard zoom and drag to view

Bug fix

- Repair macOS text tool compatibility issue
- Repair iOS ES6 compatibility issue
- Repair iOS H5PPT compatibility issue

2.0.0.5 @ 2019.05.24

Bug fix

- Replace web board with version 2.0.0.2 to repair iOS H5PPT display compatibility issue

2.0.0.4 @ 2019.05.22

Bug fix

- Repair iOS 8.4 whiteboard creation without `onTEBInit` callback issue
- Repair the issue of JavaScript error returned when creating a whiteboard on iOS 9.3/8.4
- Repair the Text Tool Unavailability Issue on macOS

2.0.0.2 @ 2019.05.17

Bug fix

- Repair the issue of no `onTEBInit` callback when creating a whiteboard on iOS 12.1
- Adjust the `TEduBoardErrorCode` error codes `TEDU_BOARD_ERROR_LOAD` and `TEDU_BOARD_ERROR_AUTH` order

2.0.0.1 @ 2019.05.15

New features

- add mouse tool type `TEDU_BOARD_TOOL_TYPE_MOUSE`
- Support setting H5 background
- Whiteboard supports concurrent file upload

bug fix

- Repair the issue of whiteboard data synchronization failure in RC3 versions

2.0.0_RC3 @ 2019.05.10

New features

- Support for setting text styles and font attributes
- Initialization interface supports passing all property initial values
- Initialization supports setting the whiteboard aspect ratio
- `AddFile` interface supports passing in COS transcoding URL

2.0.0_RC2 @ 2019.05.08

New features

- macOS platform support
- PPT animation display

Bug fix

- Spelling Error Correction: Renamed TIC `getTRTCCloud` interface to `getTRCCloud`

2.0.0_RC1 @ 2019.04.26

New features

- Audio and video communication
 - TRTC communication
 - Screen Sharing/Playback (can coexist with camera feed)
- IM
 - Message
 - Group
 - Relationship Chain Management
- Whiteboard
 - Doodling (pencil, eraser, laser pointer, line, hollow oval, hollow rectangle, solid oval, solid rectangle, text).
 - Background color, background image.
 - Click, box selection, mobile graffiti, undo, redo.
 - Whiteboard Zoom, Mobile.
 - File Display (Static: supports PPT, PDF, WORD, EXCEL), Multi-file Support.

Web

Last updated: 2024-12-23 11:45:37

2.9.8 @ 2024.12.10

Link address <https://res.qcloudtiw.com/board/2.9.8/TEduBoard.min.js>

- API changes
 - Added setBrushThinMode and setTextSizeMode APIs to solve the problem of oversized doodles and text on long whiteboards.
 - Added API to support doodling on video files: setVideoFileDrawEnable.
 - The brush icon setting API (setCursorIcon) supports synchronization to the remote end.
 - Added requestTimeout parameter during initialization to configure the timeout for whiteboard API requests.
- Callback Event Changes
 - Add PPT hyperlink click event: TEB_H5PPT_DID_CLICK_LINK.
- Fixes
 - Compass only draws one point and cannot be erased.
 - Remove whiteboard logo from console output.
 - After addBackupDomain, resource auto-switching does not work (resource domain needs to enable cross-domain support).

2.9.7 @ 2024.10.9

Link address: <https://res.qcloudtiw.com/board/2.9.7/TEduBoard.min.js>

- API changes
 - Added custom DOM container parameter for laser pointer.
 - Added support for whiteboard container scaling.
 - Added callback for manual play prompt of video in remote PPT.
 - Added left and top attributes for teaching tool elements.
- Fixes
 - Teaching tools cannot be used after modifying their position with the updateElementById method.
 - Teaching tools are compressed and unusable on vertical whiteboards.
 - Audio files are not automatically deleted remotely after switching whiteboard pages.

2.9.6 @ 2024.05.13

- Link address: <https://res.qcloudtiw.com/board/2.9.6/TEduBoard.min.js>

- API changes
 - The addH5File interface adds the enableDraw parameter to support drawing.
- Fixes
 - The text cursor may move back a few spaces after a line break on Windows.
 - Whiteboard operations may be lost when creating multiple whiteboards simultaneously in group mode.
 - The hierarchy of graffiti changes with segmented erasing.
 - Icon residue issue after using the eraser on iOS.

2.9.5 @ 2024.01.31

- Link address: <https://res.qcloudtiw.com/board/2.9.5/TEduBoard.min.js>
- Callback Event Changes
 - In the new transcoding scheme, Audio and Video now include the `currentTime` property during play/pause, indicating media playback progress.
- API changes
 - `playH5PPTVideo` , `pauseH5PPTVideo` , `playH5PPTAudio` , `pauseH5PPTAudio` APIs now support controlling Audio and Video playback in new transcoding scheme (CI) PPT, PPTX files.

Note:

Due to technical limitations, the new transcoded courseware can only achieve **all play/pause of media (does not distinguish between audio and video)** on the current page.

- Optimized experience
 - Image elements now support dragging beyond the whiteboard boundary.
- Fixes
 - In Group Mode, there is a probability of segment erasure failure.
 - For the protractor teaching aid, setting 0° will display as 30° on the remote.

2.9.4 @ 2023.12.28

- Link address: <https://res.qcloudtiw.com/board/2.9.4/TEduBoard.min.js>
- Initialization Parameters

Added `config.h5PPTDownGradeTimeoutTimes`, H5PPT resource load timeout times, default is 0, no downgrade processing; if it exceeds the default number of times, the SDK will actively give the `TEduBoard.EVENT.TEB_H5PPT_DOWN_GRADE` callback event,

invoke `setDownGradeEnable` API, to determine downgrade settings. If downgraded, display as thumbnails of transcoded files.

- New interface

1.1 Automatic selection of geometric elements `autoSelectedElement`, used with `TEduBoard.EVENT.TEB_ADDELEMENT`, invoked when callback parameter `type == TEduBoard.TEduBoardElementType.TEDU_BOARD_ELEMENT_GEOMETRY`, the element will be automatically selected.

1.2 Set H5PPT file downgraded rendering `setDownGradeEnable`.

- New callback event

1.3 Add H5PPT page downgraded rendering event notification: `TEduBoard.EVENT.TEB_H5PPT_DOWN_GRADE`, proceed with the `setDownGradeEnable` interface to configure downgraded rendering settings.

- API changes

1.4 Add whiteboard API `addBoard` with new configuration attribute `index` to specify the page number for adding whiteboard.

1.5 Internal multimedia resource playback status callback event in H5PPT `TEB_H5PPT_MEDIA_STATUS_CHANGED` adds a new return parameter `currentTime`, which indicates media playback progress in H5PPT.

- Others

1.6 mini programs webview version adds dot eraser feature.

1.7 mini programs other known bugs.

2.9.3 @ 2023.11.30

- Link address: <https://res.qcloudtiw.com/board/2.9.3/TEduBoard.min.js>

- New interface

1.1 Play H5 transcoded PPT current page video: `playH5PPTVideo`

1.2 Pause H5 transcoded PPT current page video: `pauseH5PPTVideo`

1.3 Play H5 transcoded PPT current page audio: `playH5PPTAudio`

1.4 Pause H5 transcoded PPT current page audio: `pauseH5PPTAudio`

- API changes

1.1 Get file information interface `getFileInfo`: a new field `pptMediaInfo` is added to the return result, which contains the list of audio and video element IDs on the current page of the H5 transcoded PPT.

- Feature changes

1.1 Zoom and move tool: now supports `Alt` key (on Mac systems, `Option` key) + scroll wheel to move the whiteboard left and right. The complete usage instructions are as follows:

终端类型	交互方式		效果
移动端	单指		移动
	双指		放大/缩小
PC/Mac/Web	鼠标左键点击	鼠标有移动	移动
		鼠标无移动	放大
		鼠标无移动 + Shift	缩小
	鼠标滚轮	滚动	移动
		滚动 + Alt	横向移动
		滚动 + Shift	放大/缩小

1.2 Rectangle Selection Tool: When moving/scaling elements, they will now stay within the whiteboard's range.

1.3 Text tool: when the text content is too high, input will be blocked and the text content will not be automatically truncated at the end.

- Fixes

1.1 Zoom and move tool: on Mac systems, `shift + scroll wheel` cannot trigger zooming.

1.2 Zoom and move tool: occasionally, `shift + scroll wheel` can move the whiteboard horizontally.

2.9.2 @ 2023.10.30

- Link address: <https://res.qcloudtiw.com/board/2.9.2/TEduBoard.min.js>

- New interface

1.1 Add set cursor position interface: `setCursorPosition`, which can be used in scenarios where the cursor needs to be displayed locally and remotely when mouse response is disabled.

1.2 API to set text tool line height: `setTextLineHeight`, supports passing in numbers. The created text box will use the set line height after setting.

- New callback event

1.1 New callback event: `TIW_RESET_DATA`, triggers when invoking the `reset` API.

- Interface Optimization

1.1 Modify element interface: `updateElementById` now adds a new `type--TEduElementOperatorType.ROTATION_ANGLE`, which supports modifying the rotation angle of elements. See [API documentation](#) for details.

1.2 Add element interface: `addElement` now also supports setting the rotation angle for elements other than watermark elements `deg`.

1.3 Add transcode file interface: `addTranscodeFile` now also supports adding COS transcoded PDF files.

- Fixes

1.1 **Show/Hide Element, Clear Whiteboard** then performing an undo operation will definitely cause the element to be displayed.

1.2 Setting **Image or H5 Background** and turning to other pages causes a large number of requests for background resources issue.

1.3 Error occurs in full-size screenshot when no courseware is added issue.

1.4 In drawing disabled state, clicking text elements sends active input events issue.

- Others

2. Starting from version 2.9.2, the Interactive Whiteboard SDK adds the npm package release mode. For details, see the [SDK npm introduction page](#).

2.9.1 @ 2023.09.13

Link address: <https://res.qcloudtiw.com/board/2.9.1/TEduBoard.min.js>

- Optimization

1.1 Optimize input performance of text tool in large text volume scenario.

2.9.0 @ 2023.08.22

Link address: <https://res.qcloudtiw.com/board/2.9.0/TEduBoard.min.js>

- New Events

1.1 Add new drawing action state switching event `TEB_DRAW_STATUS_CHANGED`.

- Optimization

1.1 Fix the issue of modifying color in mathematical formulas not supported.

1.2 Fix the issue where custom graphics still display on the canvas when deleting a whiteboard.

1.3 Fix the issue where the free zoom drag icon appears when rotating custom elements.

2.8.9 @ 2023.07.20

Link address: <https://res.qcloudtiw.com/board/2.8.9/TEduBoard.min.js>

- Initialization Parameters

1.1 Add `styleConfig.scrollbarThumbColor` parameter to set whiteboard scrollbar **slider** color.

1.2 Add `styleConfig.scrollbarTrackColor` parameter to set whiteboard scrollbar **slide rail** color.

- Optimization

1.1 In the scenario of whiteboard auto zoom, the `TEB_BOARD_SCALE_CHANGE` event callback will now also be triggered.

2.8.8 @ 2023.06.26

Link address: <https://res.qcloudtiw.com/board/2.8.8/TEduBoard.min.js>

- Update Events

1.1 Warning event warning code adds `TEDU_BOARD_WARNING_FILE_NOT_FOUND`, which will be triggered if the file to be operated on does not exist.

1.2 Screenshot event (`TEduBoard.EVENT.TEB_SNAPSHOT`) adds the code field to indicate whether the screenshot was successful.

1.3 H5 PPT loading status event adds

`TEDU_BOARD_H5_PPT_STATUS_IMAGE_ABNORMAL`, which will be triggered if the image resources within the PPT fail to load.

- Optimization

1.1 Fixed the issue of discrepancies in the pause time points of video file play pause across all platforms.

2.8.7 @ 2023.05.19

- Link address: <https://res.qcloudtiw.com/board/2.8.7/TEduBoard.min.js>

- Initialization Parameters

1.1 Adds the `config.h5PPTLoadTimeout` parameter to configure the H5 PPT loading timeout.

1.2 Adds the `config.h5PPTResourceTimeout` parameter to configure the H5 PPT internal resource loading timeout.

- New interface

1.1 Added element locking interface `lockElements`, supporting locking and unlocking of elements.

- New Events

1.1 Add element lock state change event `TEB_BOARD_ELEMENT_LOCKED_CHANGED`.

1.2 Add H5 PPT multimedia resource playback status `TEB_H5PPT_MEDIA_STATUS_CHANGED`.

- Update Interface

1.1 Get Element Details Interface `getElementById` returned result adds a `locked` field, indicating whether the element is locked.

- Update Events

1.1 `TEB_GOTOBOARD` Page Turning Event adds a parameter to indicate the operator who triggered this page turning.

1.2 Warning event warning code adds `TEDU_BOARD_WARNING_ELEMENT_IS_LOCKED`, which will be triggered when performing delete, move, rotate, etc. operations on locked

elements.

2.8.6 @ 2023.04.11

- Link address: <https://res.qcloudtiw.com/board/2.8.6/TEduBoard.min.js>
- Update Interface
 - 1.1 snapshot interface adjusts the whiteboard screenshot area, supports specified parameters to set whether to capture the full-size whiteboard.
 - 1.2 importInLocalMode interface supports undo and redo data export, allowing undo and redo operations after exportInLocalMode.
- Optimization
 - 1.1 Fixed an issue where adding video files on iPhone 6 would automatically play.

2.8.5 @ 2023.03.13

- Link address: <https://res.qcloudtiw.com/board/2.8.5/TEduBoard.min.js>
- New interface
 - 1.1 Set whether elements are displayed or hidden with setElementsDisplay.
- Update Interface
 - 1.1 exportInLocalMode supports specifying element types/element IDs, hiding elements, etc., during export.
 - 1.1.2 importInLocalMode supports specifying element types/element IDs, hiding elements, etc., during import.
 - 1.3 getBoardElementList adds a second parameter to support retrieving hidden elements on the page.
- New Events
 - 1.1 Element size and position change event TEB_BOARD_ELEMENT_POSITION_CHANGE adds a status field to indicate the state of element change: start, changing, and end.
 - 1.2 Warning codes TEduBoardWarningCode add
TEDU_BOARD_WARNING_EXPORTIMPORT_FILTERRULE_ILLEGAL,
TEDU_BOARD_WARNING_ELEMENTTYPE_NOT_EXISTS,
TEDU_BOARD_WARNING_ELEMENTID_NOT_EXISTS.

2.8.4 @ 2023.02.24

- Link address: <https://res.qcloudtiw.com/board/2.8.4/TEduBoard.min.js>
- New interface
 - 1.1 Get background image information getBackgroundImage.
- Update Interface
 - 1.1 setBackgroundImage and setBackground H5 interfaces support setting an empty string to clear the background.

1.2 exportData interface renamed to exportInLocalMode.

1.3 importData interface renamed to importInLocalMode.

- Deprecated Interface

1.1 exportData

1.2 importData

- New Events

1.1 importInLocalMode interface data import completion event

TEB_BOARD_IMPORTINLOCALMODE_COMPLETED.

- Add Initialization Parameters

1.1 Support setting operation behavior after selecting elements (can set whether to allow scaling, moving, rotating, proportional scaling),
initParams.authConfig.elementOperationAuthority.

2.8.3 @ 2023.01.12

- Link address: <https://res.qcloudtiw.com/board/2.8.3/TEduBoard.min.js>

- New interface

1.1 New interface setBackgroundImageAngle for setting the background image angle.

- Update Interface

1.1 addElement interface supports setting text watermark.

- Optimization

1.1 Static transcoding courseware page-turning effect optimization.

2.8.2 @ 2022.12.23

- Link address: <https://res.qcloudtiw.com/board/2.8.2/TEduBoard.min.js>

- New interface

1.1 Exporting data exportData.

1.2 Importing data importData.

2.8.1 @ 2022.12.12

- Link address: <https://res.qcloudtiw.com/board/2.8.1/TEduBoard.min.js>

- New support

1.1 The addVideoFile interface supports carrying parameters in the URL to assist business URL authentication.

1.2 The addElement supports image watermark, and TEduBoardElementType adds a new type TEDU_BOARD_ELEMENT_WATERMARK.

2.8.0 @ 2022.11.16

- Link address: <https://res.qcloudtiw.com/board/2.8.0/TEduBoard.min.js>
- New interface
 - 1.1 Disable whiteboard event responding disablePointerEventResponding.
- New permission system
 - 1.2 Enable permission validation enablePermissionChecker.
 - 1.3 Disable permission validation disablePermissionChecker.
 - 1.4 Permission change event TEB_BOARD_PERMISSION_CHANGED.
 - 1.5 No permission event TEB_BOARD_PERMISSION_DENIED.

2.7.9 @ 2022.10.19

- Link address: <https://res.qcloudtiw.com/board/2.7.9/TEduBoard.min.js>
- New interface
 - 1.1 Whether to display local graffiti enableShowGraffiti.
- Update Interface
 - 1.1 When the new parameter type of addElement is TEDU_BOARD_ELEMENT_AUDIO or TEDU_BOARD_ELEMENT_GLOBAL_AUDIO, the element title can be set.
 - 1.2 getElementById When getting element data, a new field 'title' was added.
- New features
 - 1.1 Remote synchronization of educational tool element operation display screen.
- Bug and feature optimizations
 - 1.1 PPT Transcoding operation feature optimization.
 - 1.2 Handling of other known issues.

2.7.8 @ 2022.09.20

- Link address: <https://res.qcloudtiw.com/board/2.7.8/TEduBoard.min.js>
- New interface
 - 1.1 Enable multi-touch enableMultiTouch.
 - 1.2 Set the sync frequency of the modification signal, the allowable range of this value is [5, 20] setSyncFps.
- Update Interface
 - 1.1 updateElementById Update the element, a new position offset type TEduElementOperatorType.CHANGE_POSITION was added.
 - 1.2 The setToolType API adds a type: coordinate system TEDU_BOARD_TOOL_TYPE_COORDINATE.
- Bug and optimization handling

- 1.1 Optimize compass operation.
- 1.2 Graphic fitting optimization.
- 1.3 Other known issues optimization.

2.7.7 @ 2022.08.31

- Link address: <https://res.qcloudtiw.com/board/2.7.7/TEduBoard.min.js>
- New interface
 - 1.1 Get element information getElementById.
 - 1.2 Set element style updateElementById.
 - 1.3 Set highlighter color, brush color for all highlighter drawings setHighlighterColor.
 - 1.4 Get highlighter color getHighlighterColor.
 - 1.5 Enable automatic graphic fitting during graffiti drawing enablePenAutoFit.
 - 1.6 Set graphic style setGraphStyle.
 - 1.7 Get graphic style getGraphStyle.
- Deprecated interface:
 - 1.1 Deprecated setLineStyle, please use setGraphStyle.
 - 1.2 Deprecated getLineStyle, please use getGraphStyle.
- New features
 - 1.1 Add mathematical teaching tool compass.
 - 1.2 Add new geometric figures (Right Triangle, Isosceles Triangle, Parallelogram, Cube, Cylinder, Cone).
 - 1.3 Other Features
- Bug and optimization handling
 - 1.1 PPT page turning optimization.
 - 1.2 Other known issues optimization.

2.7.6 @ 2022.08.16

- Link address: <https://res.qcloudtiw.com/board/2.7.6/TEduBoard.min.js>
- New features
 - 1.1 Add mathematical teaching aids feature, supporting Ruler, Triangle, and Protractor.
 - 1.2 Add new retrieval of PPT notes feature.
- Bug Fix
 - 1.1 Other known issues have been fixed.

2.7.5 @ 2022.08.01

- Link address: <https://res.qcloudtiw.com/board/2.7.5/TEduBoard.min.js>
- New features
 - 1.1 PPT old version transcoding, supports MP3 and MP4 playback synchronization.
 - 1.2 PPT new version transcoding, supports MP3 and MP4 playback synchronization.
 - 1.3 Add reporting for error and warning events.
- Bug and optimization handling
 - 1.1 Fix the issue where Host lacks protocol when retrieving resources.
 - 1.2 Other known issues have been fixed.

2.7.4 @ 2022.07.04

- Link address: <https://res.qcloudtiw.com/board/2.7.4/TEduBoard.min.js>
- New features
 - 1.1 Support MP3 and MP4 playback in the webview version of mini programs.
 - 1.2 Callback during courseware preloading, returns the preloading progress value.
- Adjust Event
 - 1.1 Add high bitrate alarm callback type for multimedia resources (TEDU_BOARD_WARNING_IMAGE_MEDIA_BITRATE_TOO_LARGE).
- Bug Fix
 - 1.1 Eraser does not erase cleanly during fast movement, causing omissions.
 - 1.2 PPT transcoding issue, transcoded files are considered as pad by the system, only responding to slide turning, not click events.
 - 1.3 Other known issues have been fixed.

2.7.3 @ 2022.05.20

- Link address: <https://res.qcloudtiw.com/board/2.7.3/TEduBoard.min.js>
- Adjust Initialization Parameters
 - 1.1 In permission configuration, add customCursorIcon parameter: whether to customize the mouse style, default is false to show the system's built-in style, true requires customizing the mouse style based on the returned mouse position.
- Adjust Event
 - 1.1 When customizing mouse style, coordinate position callback (TEB_BOARD_CURSOR_POSITION), user customizes mouse style based on position.
- New interface
 - 1.1 Whether to display local alias (setOwnerNickNameVisible), when set to false, pen part does not display own NickName.
- Optimize Historical Data Pull

1.1 First frame rendering only pulls active whiteboard historical data.

1.2 When users turn pages, the operator will pull, corresponding whiteboard page historical data, and broadcast to other users in the room.

- Bug Fix

1.1 Handle video full-screen issue for Android terminal.

1.2 Other known issues have been fixed.

2.7.2 @ 2022.04.01

- Link address: <https://res.qcloudtiw.com/board/2.7.2/TEduBoard.min.js>

- Error code adjustment

1.1 **Error code** added `TEDU_BOARD_MAX_BOARD_LIMITED` error code, triggered when the total number of whiteboard pages in a single room reaches the limit.

- Bug Fix

1.1 Repair the issue of abnormal automatic correction function for image orientation on Android 5.x.

1.2 Repair some issues where PPT successful transcoding but whiteboard loading failure.

2.7.1 @ 2022.02.28

- Link address: <https://res.qcloudtiw.com/board/2.7.1/TEduBoard.min.js>

- Feature Optimization

1.1 Whiteboard and courseware resource backup domain optimization.

- Bug Fix

1.1 Optimization of historical data loading time.

2.7.0 @ 2022.01.31

- Link address: <https://res.qcloudtiw.com/board/2.7.0/TEduBoard.min.js>

- Bug Fix

1.1 Repair occasional jitter issue after point erase on lines.

1.2 Repair the issue of drawing style error with only two points of graffiti data.

1.3 Repair the issue of graffiti drawing style error caused by graffiti real-time data disorder.

2.6.9 @ 2021.12.27

- Link address: <https://res.qcloudtiw.com/board/2.6.9/TEduBoard.min.js>

- New interface

1.1 Support PPT courseware mute operation (soundMuteForPPT).

- Feature optimization
 1. Optimize courseware loading.
- Bug Fix
 - 1.1 The screenshot feature loses several pixels in abnormal dpr cases.
 - 1.2 Repair the issue of initialization failed on vivo 5.x and 6.x versions.

2.6.8 @2021.12.10

- Link address: <https://res.qcloudtiw.com/board/2.6.8/TEduBoard.min.js>
- New interface
 - 1.1 Jump to specified animation steps (gotoStep).
 - 1.2 Retrieve whiteboard scrolling position (getBoardScroll).
 - 1.3 Set segmented erasure mode on status (setPiecewiseErasureEnable).
 - 1.4 Get segmented erasure mode on status (isPiecewiseErasureEnable).
 - 1.5 Set eraser size (setEraserSize).
 - 1.6 Get eraser size (getEraserSize).
 - 1.7 Set global background image (setGlobalBackgroundPic).
 - 1.8 Get global background image (getGlobalBackgroundPic).
- Adjust Interface
 - 1.1 Add whiteboard elements (addElement) supports adding text elements (TEDU_BOARD_ELEMENT_TEXT).
- New Events
 - 1.1 Whiteboard move callback (TEB_BOARD_SCROLL_CHANGED).
- Adjust Event
 - 1.1 Box selection tool element selection callback (TEB_SELECTED_ELEMENTS) returns fields such as new element position, width and height, bounding box size.
- Add Initialization Parameters
 - 1.1 Global background image (globalBackgroundPic).
- Feature Optimization
 - 1.1 Optimized image resource loading logic.
 - 1.2 Added rotation correction for image elements on lower versions.
 - 1.3 Added support for custom size of image elements.
 - 1.4 Supports segmented erasing of drawn lines.
- Bug Fix
 - 1.1 Inconsistent display of whiteboard element sizes at different zoom ratios.
 - 1.2 Some known problems have been fixed.

2.6.8 @2021.12.10

- Link address: <https://res.qcloudtiw.com/board/2.6.8/TEduBoard.min.js>
- New interface
 - 1.1 Jump to specified animation steps (gotoStep).
 - 1.2 Retrieve whiteboard scrolling position (getBoardScroll).
 - 1.3 Set segmented erasure mode on status (setPiecewiseErasureEnable).
 - 1.4 Get segmented erasure mode on status (isPiecewiseErasureEnable).
 - 1.5 Set eraser size (setEraserSize).
 - 1.6 Get eraser size (getEraserSize).
 - 1.7 Set global background image (setGlobalBackgroundPic).
 - 1.8 Get global background image (getGlobalBackgroundPic).
- Adjust Interface
 - 1.1 Add whiteboard elements (addElement) supports adding text elements (TEDU_BOARD_ELEMENT_TEXT).
- New Events
 - 1.1 Whiteboard move callback (TEB_BOARD_SCROLL_CHANGED).
- Adjust Event
 - 1.1 Box selection tool element selection callback (TEB_SELECTED_ELEMENTS) returns fields such as new element position, width and height, bounding box size.
- Add Initialization Parameters
 - 1.1 Global background image (globalBackgroundPic).
- Feature Optimization
 - 1.1 Optimized image resource loading logic.
 - 1.2 Added rotation correction for image elements on lower versions.
 - 1.3 Added support for custom size of image elements.
 - 1.4 Supports segmented erasing of drawn lines.
- Bug Fix
 - 1.1 Inconsistent display of whiteboard element sizes at different zoom ratios.
 - 1.2 Some known problems have been fixed.

2.6.7 @ 2021.10.26

- Link address: <https://res.qcloudtiw.com/board/2.6.7/TEduBoard.min.js>
- New interface
 - 1.1 Set custom font (setTextFontFamily).

- 1.2 Add custom fonts (addTextFontFamily).
- 1.3 Get current used fonts (getTextFontFamily).
- Adjust Initialization Parameters
 - 1.1 Whether the remote brush is visible in brush mode (remoteCursorVisible).
- Adjust Interface
 - 1.1 Set remote pen visibility locally (setRemoteCursorVisible).
- Adjust Global Variables
 - 1.1 Whiteboard warning code (TEduBoardWarningCode), added alarm code for duplicate static PPT.
- Feature Optimization
 - 1.1 Graffiti synchronization in poor network environment.
 - 1.2 Optimize graffiti display effect.
- Bug Fix
 - 1.1 Some known problems have been fixed.

2.6.6 @ 2021.09.28

- Link address: <https://res.qcloudtiw.com/board/2.6.6/TEduBoard.min.js>
- New interface
 - 1.1 Set Whiteboard Scrollbar Visibility (setScrollBarVisible).
- Adjust Interface
 - 1.1 Get specified file information in whiteboard (getFileInfo).
 - 1.2 Get file information list of all uploaded files in whiteboard (getFileInfoList).
 - 1.3 Add H5 page (addH5File).
 - 1.4 Batch import images to whiteboard (addImagesFile).
 - 1.5 Add video file (addVideoFile).
- Adjust Global Variables
 - 1.1 Whiteboard file type (TEduBoardFileType).
- Feature Optimization
 - 1.1 Excessive graffiti causes rendering lag.
 - 1.2 Optimize log reporting logic.
 - 1.3 Increase network detection capability.
 - 1.4 Optimize SDK size.
 - 1.5 Window-side SDK upgrade CEF kernel.
- Bug Fix
 - 1.1 Some known problems have been fixed.

2.6.5 @ 2021.08.24

- Link address: <https://res.qcloudtiw.com/board/2.6.5/TEduBoard.min.js>
- New interface
 - 1.1 Set output log level (setLogLevel).
- Adjust Global Variables
 - 1.1 Geometric Element Type (TEduBoardMathGraphType).
 - 1.2 Log Level (TEduBoardLogLevel).
- Deprecated interfaces and events
 - 1.1 SDK interface: Initiate file transcoding request (applyFileTranscode).
 - 1.2 Callback Event: Transcoding progress callback (TEB_TRANSCODEPROGRESS).
 - 1.3 Global Constants: File Transcoding Status (TEduBoardTranscodeFileStatus).
- Feature Optimization
 - 1.1 Add support for various geometric shapes in geometry drawing board.
- Bug Fix
 - 1.1 Some known problems have been fixed.

2.6.4 @ 2021.08.16

- Link address: <https://res.qcloudtiw.com/board/2.6.4/TEduBoard.min.js>
- New group mode
 - 1.1 Add whiteboard to group addBoardToClassGroup.
 - 1.2 Add user to group addUserToClassGroup.
 - 1.3 Get all group ids getAllClassGroupIds.
 - 1.4 Get group mode status getClassGroupEnable.
 - 1.5 getClassGroupIdByUserId
 - 1.6 getClassGroupInfoByGroupId
 - 1.7 gotoClassGroupBoard
 - 1.8 removeBoardInClassGroup
 - 1.9 removeClassGroup
 - 1.10 removeUserInClassGroup
 - 1.11 resetClassGroup
 - 1.12 setClassGroup
 - 1.13 setClassGroupEnable
 - 1.14 setClassGroupTitle

2.6.4 @ 2021.08.06

- Link address: <https://res.qcloudtiw.com/board/2.6.4/TEduBoard.min.js>
- New interface
 - 1.1 setMathGraphType
 - 1.2 setMouseToolBehavior
 - 1.3 setBoardRemark
 - 1.4 getBoardRemark
- Add Initialization Parameters
 - 1.1 setMouseToolBehavior
 - 1.2 Enable formula element support.
- Added element type
 - 1.1 Formula elements `TEDU_BOARD_ELEMENT_FORMULA`, this feature requires enabling formula element support `formulaEnable` to `true`. For the add method, see [add whiteboard elements](#) `Example 8: Add a formula element.`
- Added global variable
 - 1.1 Geometric element type.
- Feature Optimization
 - 1.1 Support for erasing graffiti points.
 - 1.2 Add support for various geometric shapes in geometry drawing board.
 - 1.3 Add support for new formula elements.
 - 1.4 Optimize video loading and playback logic.
 - 1.5 Real-time synchronization display of graphic graffiti drawing.
 - 1.6 Optimize PPT resource loading retry logic.
- Bug Fix
 - 1.1 Scroll bar jitter when interactive whiteboard width and height change.
 - 1.2 Reset remote PPT animation steps when deleting files.
 - 1.3 Remote graphic display error when custom graphic height is 0.
 - 1.4 Some known problems have been fixed.

2.6.3 @ 2021.06.28

- Link address: <https://res.qcloudtiw.com/board/2.6.3/TEduBoard.min.js>
- New interface:
 - 1.1 Set pen automatic fitting mode `setPenAutoFittingMode`.
 - 1.2 Generate whiteboard image `addSnapshotMark`.
- Adjust interface:
 - 1.1 Add whiteboard `addBoard` (support setting background H5 directly for new whiteboard).

- New initialization parameters:
 - 1.1 Whiteboard offline alarm time interval `offlineWarningTimeout`.
- New Events:
 - 1.1 Whiteboard offline alert `TEB_OFFLINE_WARNING`.
- Adjust events:
 - 1.1 Add element callback `TEB_ADDELEMENT` (add element callback return value added element type type).
- Optimization:
 - 1.1 Magic pen function.
 - 1.2 Support direct creation of H5 background whiteboard.
 - 1.3 Support whiteboard offline detection.
 - 1.4 Support generate blackboard notes.
- Bug Fix
 - 1.1 Several known issues.

2.6.2 @ 2021.06.09

- Link address: <https://res.qcloudtiw.com/board/2.6.2/TEduBoard.min.js>
- Adjust interface:
 - 1.1 Add whiteboard elements `addElement`.
- Adjust initialization parameters:
 - 1.1 Initialize permission parameters `mathGraphEnable`, preload mathematical function image library.
 - 1.2 Initialize configuration parameters `scaleRange`, whiteboard zoom range.
- New Events:
 - 1.1 Box selection tool element selection callback `TEB_SELECTED_ELEMENTS`, original callback event `TEB_RECTSELECTED` deprecated.
 - 1.2 Mathematical function image tool event callback `TEB_MATH_GRAPH_EVENT`.
 - 1.3 Remote whiteboard zoom and move status callback `TEB_ZOOM_DRAG_STATUS`.
- Abolish Interface
 - 1.1 Abolish adding image elements `addImageElement`, please use add whiteboard elements `addElement`.
- Optimization:
 - 1.1 Support mathematical function image display.
 - 1.2 Support movement, zoom, and rotation of HTML5 elements.

1.3 Add element support for custom position, currently supports image elements, H5 elements, and mathematical function images.

1.4 Mobile terminal supports double-finger zooming of whiteboard under any tool.

- Bug Fix

1.1 Several known issues

2.6.1 @ 2021.06.01

- Link address: <https://res.qcloudtiw.com/board/2.6.1/TEduBoard.min.js>

- Adjust interface:

1.1 Set tool prompt setTypeTitle.

1.2 Set which users' drawn graphics are allowed to operate setAccessibleUsers.

1.3 Set user information setUserInfo.

- Adjust initialization parameters:

1.1 Optimize initialization parameter structure.

- New Events:

1.1 Text component status callback TEB_TEXT_ELEMENT_STATUS_CHANGED.

1.2 Image element loading status TEB_IMAGE_ELEMENT_STATUS_CHANGED.

1.3 Whiteboard text tool exception warning TEB_TEXT_ELEMENT_WARNING.

- Optimization:

1.1 Graffiti supports scaling and rotation.

1.2 Text supports proportional scaling.

1.3 Optimize user permission control.

1.4 Support display of remote operation elements.

1.5 Support display of whiteboard element operator or creator information.

1.6 Support automatic hiding of stationary remote pens.

1.7 Optimize low version background image display.

- Bug Fix

1.1 Several known issues.

2.6.0 @ 2021.05.07

- Link address: <https://res.qcloudtiw.com/board/2.6.0/TEduBoard.min.js>

- Key features:

1.1 Support new transcoding scheme, see [New File Transcoding](#) for details.

- New interface:

1.1 Added proxy server setting (setProxyServer).

- 1.2 Added setting for the number of layers to erase at once (setEraseLayerLimit).
- 1.3 Added restriction on the data types that the eraser can erase (setEraseLayerType).
- New initialization parameters:
 - 1.1 Added initialization parameter for proxy server configuration proxyServer.
- Optimization:
 - 1.1 Optimize doodling drawing performance.
 - 1.2 Optimize doodling rotation and movement performance.
 - 1.3 Laser pen movement performance optimization.
 - 1.4 Laser pen multi-end synchronization effect optimization.
 - 1.5 PPT and image element loading.
 - 1.6 Error in the selection range when doodling exceeds the whiteboard area.
 - 1.7 Optimized reflow and repaint operations during whiteboard rendering bug fixes.
 - 1.1 Text elements are occluded by iframe elements when taking screenshots.
 - 1.2 Straight line collision detection calculation error.
 - 1.3 Several other known issues.

2.5.7 @ 2021.02.02

- Link address: <https://res.qcloudtiw.com/board/2.5.7/TEduBoard.min.js>
- New interface:
 - 1.1 Add an interface to move the whiteboard (setScaleAnchor).
 - 1.2 Add an interface to display the remote brush during line drawing (setRemoteCursorVisible).
 - 1.3 Audio element – Set the volume level (setAudioVolume).
 - 1.4 Audio element – Get the volume level (getAudioVolume).
 - 1.5 Add an interface to set the scaling ratio of the scaling tool (setScaleToolRatio).
 - 1.6 Add an interface to add resource primary and backup domain mappings (addBackupDomain).
 - 1.7 Add an interface to delete resource primary and backup domain mappings (removeBackupDomain).
 - 1.8 Added option to synchronize local audio operation status to remote (setSyncAudioStatusEnable).
 - 1.9 Added interface to remove whiteboard elements (removeElement).
- New Events:
 - 1.1 Element removal event (TEB_REMOVEELEMENT).
- New initialization parameters:

1.1 Add initialization parameters to disable the scaling feature of the mobile tool (enableScaleTool).

- Optimization:

1.1 Added support for specifying primary and backup urls for H5PPT, image element/image file, background image, video, etc., which requires the addition of a backup domain interface.

1.2 Static PPT page turning interaction effect optimization.

1.3 Adjusted selection box style.

1.4 Laser pen feature performance optimization.

- Bug Fix

1.1 Issue with incorrect scaling ratio after image rotation.

1.2 Missing vertical scrollbar in Chrome version 88.

1.3 Issue with exceptional scrolling triggered by the scrollbar.

1.4 Incorrect selection box range when adding custom elements.

1.5 Related issues with the Text Tool.

1.6 Several other known issues.

2.5.6 @ 2020.12.14

- Link address: <https://res.qcloudtiw.com/board/2.5.6/TEduBoard.min.js>

- New interface:

- Added interface to enable or disable the native system cursor setSystemCursorEnable.
 - After enabling this feature, the Brush Icon and Laser Pointer Icon will use the system's cursor style, providing a slight smoothness improvement locally.
 - After enabling this feature, there will be a slight delay phenomenon with the Brush Icon and Doodling, which is normal.
 - After enabling this feature, the cursor might revert to the default mouse pointer on the Mac Terminal under certain circumstances, such as message pop-ups, which is normal.
- Added interface for setting the prompts for the Brush and Laser Pointer tools setToolTypeTitle.
- Support for audio elements
 - Added audio addElement.
 - Play audio playAudio.
 - Pause audio pauseAudio.
 - Seek audio seekAudio.
 - Enable or disable the audio control panel enableAudioControl.

- New features:
 - Click and rectangle selection tools are merged.
 - Laser pointer and brush support for multiple persons.
- Experience Optimization:
 - Optimized selection accuracy for the selection tool and eraser.

2.5.5 @ 2020.11.05

- Link address: <https://res.qcloudtiw.com/board/2.5.5/TEduBoard.min.js>
- New features:
 - Added preset text content for the text tool using setNextTextInput.
 - Optimize the whiteboard zoom and move tool to support mouse wheel zoom, focus zoom, and zoom out with the shift key.
 - Add whiteboard zoom tool icon setZoomCursorIcon.
 - TEduBoardToolType includes a new custom graphic tool.
 - TEduBoardElementType adds custom graphic element types.
 - Scrollbar displayed after whiteboard enlargement.
- Bug Fix
 - Fix the bug where the Mac mouse slowly removes the left and top edges of the whiteboard, and the mouse pointer does not hide.
 - Fix the occasional bug where the pen does not disappear.
- Instructions for using zoom and move tool:

终端类型	交互方式		效果
移动端	单指		移动
	双指		放大/缩小
PC/Mac/Web	鼠标左键点击	鼠标有移动	移动
		鼠标无移动	放大
		鼠标无移动 + SHIFT	缩小
	鼠标滚轮滚动	滚动	移动
		滚动 + SHIFT	放大/缩小

2.5.4 @ 2020.10.15

- Link address: <https://res.qcloudtiw.com/board/2.5.4/TEduBoard.min.js>
- Added tool type
 - Added perfect circle and square tool classes; also supports using the Ellipse Tool and Rectangle Tool to draw perfect circles and squares by pressing the Shift key.

- Optimization
 - Optimized the inaccuracy issue of the Eraser Erase Arrow Tool.
- Bug Fix
 - Fixed the synchronization issue when simultaneously moving image elements on multiple ends.
 - Fixed known issues.

2.5.3 @ 2020.08.31

- Link address: <https://res.qcloudtiw.com/board/2.5.3/TEduBoard.min.js>
- Add Callback
 - Added video status callback TEDU_BOARD_VIDEO_STATUS_WAITING and TEDU_BOARD_VIDEO_STATUS_PLAYING.
- Bug Fix
 - Fixed the inconsistency issue of the laser pen display ratio on each end.
 - Fixed the occasional latency issue of whiteboard operations on the Mobile Terminal.
 - Fixed the micro-change issue of graffiti outside the whiteboard.
- Optimization
 - Continuous display during use of the desktop pen.
 - Callback on ERROR status after multiple video playback failures.

2.5.2 @ 2020.08.07

- Link address: <https://res.qcloudtiw.com/board/2.5.2/TEduBoard.min.js>
- Add Callback
 - Add H5 PPT status callback TEB_H5PPT_STATUS_CHANGED.

2.5.1 @ 2020.07.23

- Link address: <https://res.qcloudtiw.com/board/2.5.1/TEduBoard.min.js>
- Supported Features
 - Image elements support arbitrary angle rotation and eight-directional scaling.
- Interface Optimization
 - If the fid parameter of the getFileBoardList and getFileInfo APIs is missing, default return to current file information.
 - If the deleteFile API deletes non-current files, do not jump to default file #default.
- bug fix
 - Fixed the issue where the text tool input process caused invisible entered text in some input methods.

- Fixed the issue where the keyboard would flash once when the mobile text tool is clicked at the whiteboard boundary position.

2.5.0 @ 2020.07.2

- Link address: <https://res.qcloudtiw.com/board/2.5.0/TEduBoard.min.js>
- Feature changes
 - addVideoFile/addTranscodeFile/addImagesFile interfaces return the file ID when adding existing files.
 - Unified video playback control bar interface across platforms.
- Supported Features
 - Supported PPT hyperlink click synchronization feature.
- bug fix
 - Fixed the issue where erasing graffiti during the graffiti process caused graffiti synchronization issues.
 - Fixed the issue where adding video files in specific scenarios resulted in additional redundant whiteboards.
- Performance Optimization

2.4.9 @ 2020.06.10

- Link address: <https://res.qcloudtiw.com/board/2.4.9/TEduBoard.min.js>
- New interface
 - Added whiteboard sync and refresh interface syncAndReload.
 - Added whiteboard snapshot interface snapshot.
- Add Callback
 - Added screenshot callback

```
teduBoard.on(TEduBoard.EVENT.TEB_SNAPSHOT, ({image, userData}) =>
{
  //image is a base64 format image, userdata is transparent
  transmission fields
});
```

- Bug Fix
 - Fixed the issue where frequent video operations caused permission disorder.
 - Resolved the issue where clicking the text tool at the bottom resulted in invalid input.
 - Fixed occasional residual issues when clearing.

2.4.8 @ 2020.05.21

- Link address: <https://res.qcloudtiw.com/board/2.4.8/TEduBoard.min.js>
- New interface
 - Added refresh interface to refresh the current whiteboard.
- Add Callback
 - TEduBoardImageStatus added TEDU_BOARD_IMAGE_STATUS_READ_ERROR.
 - Added refresh callback onTEBRefresh.
- Feature Optimization
 - Video file URL supports carrying signature information.
 - Optimized checkbox feature, allowing movement by clicking inside the box.
- Bug Fix
 - Fixed the issue where switching video caused progress errors.
 - Fixed laser pointer flickering issue.
 - Fixed laser pointer jumping issue.

2.4.7 @2020.04.30

- Link address: <https://res.qcloudtiw.com/board/2.4.7/TEduBoard.min.js>
- Bug Fix
 - Fixed the issue where IM signaling repeats sending a message every time.
- Performance Optimization
 - Optimized the process of rendering graffiti by others in the room.

2.4.6 @ 2020.04.02

- Link address: <https://res.qcloudtiw.com/board/2.4.6/TEduBoard.min.js>
- Add Callback
 - TEduBoardImageStatus added two status callbacks.
 - TEDU_BOARD_IMAGE_STATUS_LOAD_TIMEOUT Image loading timeout.
 - TEDU_BOARD_IMAGE_STATUS_LOAD_CANCEL Image loading canceled.
 - onTEBRectSelected Callback for the selection made by the selection tool.
- Added parameters
 - progressBarUrl Customize Loading Icon.
 - imageTimeout Image Loading Timeout.
- Bug Fix
 - Fixed the issue of no callback when loading the same image.

2.4.4 @ 2020.03.14

- Link address: <https://res.qcloudtiw.com/board/2.4.4/TEduBoard.min.js>
- When Batch Import Image Group, limit the URL String Length to 7K; if it exceeds, return an Empty String and simultaneously Callback Error TEDU_BOARD_ERROR_DATA_TOO_LARGE.
- Replaced the internal MP4 player with videojs.
- New interface
 - addImagesFile Batch Import Images to the Whiteboard.
 - setHandwritingEnable Enable or disable Brush Stroke Function.
 - isHandwritingEnable Check whether the brush stroke function is enabled on the whiteboard.
- Add Callback
 - TEB_ADDIMAGESFILE Callback for adding a batch of image files.
- Parameter modification
 - TEduBoard initialization parameters smoothLevel default value changed to 0.
- Enumeration modification
 - TEB_ERROR Added TEDU_BOARD_ERROR_AUTH_TIMEOUT service authentication timeout, please handle this error.
 - TEB_WARNING Added TEDU_BOARD_WARNING_IMAGESFILE_ALREADY_EXISTS.
 - TEDU_BOARD_VIDEO_STATUS_PLAYING changed to TEDU_BOARD_VIDEO_STATUS_TIMEUPDATE.

2.4.1 @ 2020.01.08

- Link address: <https://res.qcloudtiw.com/board/2.4.1/TEduBoard.min.js>
- API changes
 - addImageElement Add Local Image supported.
- Added interface
 - Added image element callback onTEBAddImageElement.

2.4.0 @ 2019.12.06

- Link address: <https://res.qcloudtiw.com/board/2.4.0/TEduBoard.min.js>
- Added interface
 - Add video file addVideoFile.
 - Show or hide video control bar showVideoControl.
 - Play video playVideo.

- Pause video `pauseVideo`.
- Seek video `seekVideo`.
- Synchronize local video operation to remote `setSyncVideoStatusEnable`.
- Periodically synchronize video status to remote `startSyncVideoStatus`.
- Stop synchronizing video status `stopSyncVideoStatus`.
- Add H5 page `addH5File`.
- Add image resource `addImageElement`.

2.3.7 @ 2019.11.21

- Added interface
 - `setAccessibleUsers` to allow specific users to draw graphics.
 - `clearBackground` Delete selected graffiti.
 - `setCursorIcon` Customize mouse style.

2.3.6 @ 2019.11.12

- All transcoding resources are integrated into CDN, please upgrade.
- Deprecated `addFile`, `addH5PPTFile` interfaces, deprecated `TEB_ADDFILE`, `TEB_ADDH5PPTFILE` events.
- Added `applyFileTranscode`, `getFileTranscodeProgress`, added `TEB_TRANSCODEPROGRESS` event.
- File switching supports switching to specified page and step.

2.3.5 @ 2019.10.30

- Link address: <https://res.qcloudtiw.com/board/2.3.5/TEduBoard.min.js>
- Add interface `getThumbnaiImages` to retrieve file thumbnails.
- Added step callback `TEB_GOTOSTEP`.
- Fix the issue of graffiti ineffectiveness when the whiteboard is zoomed to a certain ratio.
- Fixed the issue of precision loss and image misalignment on all terminals after the whiteboard is enlarged.

2.3.4 @ 2019.09.25

- Graffiti shield multi-touch.
- Passthrough for PPT click events.
- Mobile terminal PPT page turning interaction supports swipe left/right to turn pages.

2.3.3 @ 2019.08.07

1. Whiteboard

- Add resource file failure reporting.
- Support large class sessions.

2.3.2 @ 2019.08.07

1. Whiteboard

- Straight lines support style settings, including solid lines, dashed lines, arrows.
- Circles and ellipses support fixed centers.
- Added addTranscodeFile interface to support restapi transcoding result.
- Deprecated setTextFontFamily (set text input font) and getTextFontFamily (get text input font) interfaces.

2.3.1 @ 2019.08.01

1. Whiteboard

- Fix inaccurate text box selection issue.
- Add built-in fonts to ensure consistent font usage across all platforms for the text input feature.
- Add mouse styles for each tool.
- Laser pointer interaction optimization.
- Add protection logic to prohibit calling whiteboard interface operations before loading historical data is complete.

2.3.0 @ 2019.07.18

1. Whiteboard

- First screen rendering optimization.
- Support drawing on the whiteboard before drawing in.
- Add retry logic for PPT loading css and js failures.
- Add file and PPT animation interface to return file ID synchronously.

2.2.1 @ 2019.06.21

Optimization

- Add new whiteboard callback events and delete whiteboard callback events, modify whiteboard ID parameter to array.

2.2.0 @ 2019.06.20

Optimization

- Pagination API adds parameters, support resetting animation steps (prevBoard, nextBoard, gotoBoard).
- Add loading icon for historical data and resource loading (progressEnable).
- Whiteboard preload supports cross-file preload.
- Animated PPT supports direct loading to specified page and step.
- Known bugs are fixed.

New features

- Add interface to get file information by file ID getFileInfo.
- Error events add new historical data synchronization failure and whiteboard internal runtime error events.

2.1.0 @ 2019.05.29

New features

- Support preload, whiteboard initialization adds parameter: preloadDepth to specify image preloading depth, default value is 5 (preload images of 5 pages before and after the current page).
- Ink optimization, whiteboard initialization adds parameter: smoothLevel to specify handwriting smoothing level, default value is 0.1, range [0, 1].
- Support data synchronization prohibition, whiteboard initialization adds parameter: dataSyncEnable to specify whether to enable data synchronization, and adds corresponding interfaces setDataSyncEnable, isDataSyncEnable.
- Eraser tool supports swipe erasing, no interface changes.
- TEduBoardWarningCode adds a new enumeration value TEDU_BOARD_WARNING_H5PPT_ALREADY_EXISTS = 3, which throws this warning when the H5PPT to be added already exists.
- Document display optimization, support independent setting of whiteboard aspect ratio, support sliding zoom.

Add Initialization Parameters	Type	Required	Default Value	Description
boardContentFitMode	Number	No	0	0 Do not automatically adjust whiteboard aspect ratio, files are scaled proportionally and centered, file width and height <= whiteboard width and height.

				<p>1 Automatically adjust whiteboard aspect ratio to match the file, file fills the whiteboard, whiteboard is scaled proportionally and centered, whiteboard width and height \leq container width and height.</p> <p>2 Automatically adjust whiteboard aspect ratio to match the file, file fills the whiteboard, whiteboard is scaled proportionally and centered, whiteboard width and height \geq container width and height.</p>
dataSyncEnable	Boolean	No	true	Data sync or not.
scale	Number	No	100	Actual zoom ratio is scale/100.
preloadDepth	Number	No	5	Preloading depth, preload whiteboard pages before and after preloadDepth.
smoothLevel	Number	No	0.1	Smoothing level, a floating-point number between 0 and 1, 0 means smoothing is not enabled.

New interface	Description
setBoardRatio	Set current whiteboard ratio.
getBoardRatio	Get current whiteboard ratio.
setBoardScale	Set current whiteboard zoom ratio.
getBoardScale	Get current whiteboard zoom ratio.
setDataSyncEnable	Set whether to sync data.
isDataSyncEnable	Get whether data sync is allowed.
setBoardContentFitMode	Set whiteboard file display mode.
getBoardContentFitMode	Get whiteboard file display mode

2.0.0.2 @ 2019.05.22

1. Bug Fix

- Compatibility issue of text input on Mac.
- Fix the issue of abnormal PPT animation display on iPhone.

2.0.0.1 @ 2019.05.15

1. New feature support:

- Whiteboard
 - Add mouse tool type TEDU_BOARD_TOOL_TYPE_MOUSE.
 - Support setting H5 background.
 - Whiteboard supports concurrent file uploads.

2. Bug Fix

- New whiteboard with border.

2.0.0_RC3 @ 2019.05.10

1. New feature support:

- Whiteboard
 - Support setting text style and font attributes.
 - Initialization interface supports passing all attribute initial values.
 - Initialization supports setting whiteboard aspect ratio.
 - `AddFile` interface supports passing COS transcoding URL.

2.0.0_RC2 @ 2019.05.08

1. New feature support:

- Whiteboard
 - Doodling (pencil, eraser, laser pointer, line, hollow oval, hollow rectangle, solid oval, solid rectangle, text).
 - Background color, background image.
 - Click, box selection, mobile graffiti, undo, redo.
 - Whiteboard Zoom, Mobile.
 - File Display (Static: supports PPT, PDF, WORD, EXCEL), Multi-file Support.
 - PPT 动画展示。

Windows

Last updated: 2024-12-23 10:39:55

2.9.5.454 @ 2024.02.01

- Callback Event Changes
 - In the new transcoding scheme, Audio and Video now include the `currentTime` property during play/pause, indicating media playback progress.
- API changes
 - `playH5PPTVideo`, `pauseH5PPTVideo`, `playH5PPTAudio`, `pauseH5PPTAudio` APIs now support controlling Audio and Video playback in new transcoding scheme (CI) PPT, PPTX files.

Note:

Due to technical limitations, the new transcoded courseware can only achieve **all play/pause of media (does not distinguish between audio and video)** on the current page.

- Optimized experience
 - Image elements now support dragging beyond the whiteboard boundary.
- Fixes
 - In group mode, segment erasure failure occurs occasionally.
 - For the protractor teaching aid, setting 0° will display as 30° on the remote.

2.9.4.449 @ 2023.12.28

• Initialization Parameters

Added `config.h5PPTDownGradeTimeoutTimes`, the number of times H5PPT resource loading times out, defaults to 0, no downgrade processing is performed; if it exceeds the set default times, the SDK proactively triggers the `TEduBoard.EVENT.TEB_H5PPT_DOWN_GRADE` callback event, calls the `SetDownGradeEnable` interface for downgrade settings; if downgraded, it displays as a thumbnail of the transcoded file;

• New interface

1.1 `AutoSelectedElement` for geometric elements, used in conjunction with `TEduBoard.EVENT.TEB_ADDELEMENT`,
Call when the callback parameter `type ==`
`TEduBoard.TEduBoardElementType.TEDU_BOARD_ELEMENT_GEOMETRY`, the

elements will be automatically selected.

1.2 Set H5PPT file downgraded rendering SetDownGradeEnable.

- New callback event

1.3 Added H5PPT page downgrade rendering event notification:

onTEBBoardDownGradeNotify, in collaboration with setDownGradeEnable interface to proceed with downgraded rendering settings.

- Added status codes

1.4 TEduBoardH5PPTStatus added

TEDU_BOARD_H5_PPT_STATUS_INTERNAL_RESOURCES_LOADING_TIMEOUT, resource loading timeout in PPT internal.

- API changes

1.5 Add whiteboard API `addBoard` with new configuration attribute `index` to specify the page number for adding whiteboard.

1.6 Internal multimedia resource playback status callback event in H5PPT `TEB_H5PPT_MEDIA_STATUS_CHANGED` adds a new return parameter `currentTime`, which indicates media playback progress in H5PPT.

- Fixes

1.7 Other known bugs.

2.9.3.431 @ 2023.12.01

- New interface

1.1 Play PPT current page video `PlayH5PPTVideo`

1.2 Pause PPT current page video `PauseH5PPTVideo`

1.3 Play PPT current page audio `PlayH5PPTAudio`

1.4 Pause PPT current page audio `PauseH5PPTAudio`

- API changes

1.5 Get file information interface `GetFileInfo`: New fields added in the return result `videoList` and `audioList`, as PPT current page's audio and video element ID list.

- Feature changes

1.6 Zoom and move tool: now supports Alt key + scroll wheel to implement whiteboard left and right movement.

1.7 Rectangle Selection Tool: When moving/zooming elements now, it will ensure elements are within the range of the whiteboard.

1.8 Text Tool: When text content is excessively high, it will prevent input and will not automatically truncate the text content at the end.

- Fixes

1.9 Zoom and Pan Tool: Occasionally, shift+scroll wheel allows for horizontal movement of the whiteboard.

2.9.2.428 @ 2023-10-30

- New Events

1.1. Added interface for setting cursor position: `setCursorPosition`, which can be used in scenarios where local and remote display of the cursor is desired when disabling mouse response.

1.2. Added interface for setting text tool line height: `setTextLineHeight`, supports passing numbers, text boxes created after setting will use the set line height.

- New callback event

1.1. Added event callback: `TIW_RESET_DATA`, triggered during invoking reset.

- Optimization

1.1. Modify element interface: `updateElementById` now adds a new type `TEduElementOperatorType.ROTATION_ANGLE`, supports modifying element rotation angle. See [API documentation](#).

1.2. Add element interface: `addElement` now also supports setting rotation angle degrees for elements other than watermark elements.

1.3. Add Transcoding File Interface: `addTranscodeFile` now also supports adding PDF files transcoded by COS.

- Fixes

1.1. When performing undo operations after displaying/hiding elements and clearing the whiteboard, it will always display the elements issue.

1.2. Issues with making mass requests for background resources after setting image or H5 background and turning to another page.

1.3. Error with full-size screenshot when no courseware is added.

1.4. Issue with sending active input event when clicking text elements in the drawing disabled state.

2.9.1.402 @ 2023-10-09

- Optimization

1.1. Optimized text tool input performance for large text volume scenarios.

2.9.0.401 @ 2023-10-09

- New Events

1.1. Added painting action state switch event `TEB_DRAW_STATUS_CHANGED`

- Optimization

- 1.1. Fixed the issue where the color of mathematical formula could not be modified.
- 1.2. Fixed the issue where custom graphics still displayed on the canvas after deleting the whiteboard.
- 1.3. Fixed the issue where the drag icon for free zoom appears when rotating custom elements.

2.8.9.357 @ 2023-7-21

- Initialization Parameters
 - 1.1. Added TEduStyleConfig.scrollbarThumbColor parameter to set the **slider** color of the whiteboard scrollbar.
 - 1.2. Added TEduStyleConfig.scrollbarTrackColor parameter to set the **track** color of the whiteboard scrollbar.
- Optimization
 - 1.1. In scenarios with automatic whiteboard zoom, TEB_BOARD_SCALE_CHANGE event callback will now be triggered.
 - 1.2. PPT operation optimization

2.8.8.354 @ 2023-6-26

- Update events:
 - 1.1. Added warning code TEDU_BOARD_WARNING_FILE_NOT_FOUND to warning events. If the file to be operated on does not exist, this warning will be triggered.
 - 1.2. Added code field to screenshot event (TEduBoard.EVENT.TEB_SNAPSHOT) to indicate whether the screenshot was successful.
 - 1.3. Added TEDU_BOARD_H5_PPT_STATUS_IMAGE_ABNORMAL status to H5 PPT loading status event. If there is an abnormality in loading image resources within the PPT, this status code will be triggered.
- Optimized Processing
 - 1.1. Fixed the issue where the pause times of video file playback were slightly different on various platforms.

2.8.7.351 @ 2023-5-19

- Initialization parameters:
 - 1.1. Fixed an issue with the abnormal default value of operation permissions
 - 1.2. Added config.imageTimeout parameter to configure image loading timeout.
 - 1.3. Added config.h5PPTLoadTimeout parameter to configure H5 PPT loading timeout.
 - 1.4. Added config.h5PPTResourceTimeout parameter to configure H5 PPT internal resource loading timeout.
- New interface

1.1. Added element lock interface LockElements, which supports locking and unlocking elements.

- New Events

1.1. Added event for the status change of element locking

TEB_BOARD_ELEMENT_LOCKED_CHANGED

1.2. Added the multimedia resource playback status for H5 PPT

TEB_H5PPT_MEDIA_STATUS_CHANGED

- Update Interface

1.1. GetElementById interface now returns the 'locked' field to indicate whether an element is locked.

- Update Events

1.1. Added a parameter to the onTEBGotoBoard page-turning event to indicate the operator triggering the page turn.

1.2. Added warning code TEDU_BOARD_WARNING_ELEMENT_IS_LOCKED to warning events, which will be triggered when attempting to delete, move, or rotate locked elements.

2.8.6.338 @ 2023-4-11

- Update Interface

1.1. Snapshot interface adjusts the whiteboard screenshot area, supporting the specification of parameters to determine whether to capture the full-size whiteboard.

1.2. ImportInLocalMode interface supports the export of undo and redo data. After ExportInLocalMode, undo and redo actions can be performed.

2.8.5.333 @ 2023-3-16

- New interface

1.1. Set whether elements are displayed or hidden SetElementsDisplay

- Update Interface

1.1. ExportInLocalMode supports specifying element types/element IDs and hiding elements for export.

1.2. ImportInLocalMode supports specifying element types/element IDs and hiding elements for import.

1.3. GetBoardElementList adds a second parameter to support retrieving hidden elements on the page.

- New Events

1.1. Element size and position change event

TEB_BOARD_ELEMENT_POSITION_CHANGE, with added status field to indicate the start, during, and end states of the element change.

1.2. Warning code TEduBoardWarningCode added
TEDU_BOARD_WARNING_EXPORTIMPORT_FILTERRULE_ILLEGAL,
TEDU_BOARD_WARNING_ELEMENTTYPE_NOT_EXISTS,
TEDU_BOARD_WARNING_ELEMENTID_NOT_EXISTS.

2.8.4.331 @ 2023-3-2

- New interface
 - 1.1 Get background image information GetBackgroundImage
- Update Interface
 - 1.1. SetBackgroundImage, SetBackgroundH5 interface supports setting an empty string to clear the background.
 - 1.2. ExportData interface renamed to ExportInLocalMode.
 - 1.3. ImportData interface renamed to ImportInLocalMode.
 - 1.4. Supports setting the behavior of selected elements (can set whether to allow scaling, moving, rotating, proportional scaling), InitParams.authConfig.elementOperationAuthority.
- New Events
 - 1.1. ImportInLocalMode interface import data completion event onTEBImportInLocalModeCompleted.

2.8.3.329 @ 2023-1-13

- New interface
 - 1.1 Export data ExportData
 - 1.2 Import data ImportData
 - 1.3 Set background image angle SetBackgroundImageAngle
- New features
 - 1.1. AddElement interface supports adding dynamic/static text watermarks.
 - 1.2. RemoveElement interface supports passing special parameters to delete all watermarks.
 - 1.3. UpdateElementById interface supports modifying watermark content and opacity.
- Optimization
 - 1.1. Optimization of page-turning effects for statically transcoded courseware

2.8.1.318 @ 2022-12-12

- New support
 - 1.1. addVideoFile interface supports carrying parameters in the URL for assisting business party URL authentication.

- 1.2. addElement supports image watermark, with new type
TEDU_BOARD_ELEMENT_WATERMARK in TEduBoardElementType.

2.8.0.317 @ 2022-11-16

- New permission system
 - 1.1. Enable permission verification: enablePermissionChecker
 - 1.2. Disable permission validation disablePermissionChecker
 - 1.3. Permission change event TEB_BOARD_PERMISSION_CHANGED
 - 1.4. No operation permission event TEB_BOARD_PERMISSION_DENIED

2.7.9.287 @ 2022-10-19

- New interface
 - 1.1 Enable display of local graffiti EnableShowGraffiti
- Update Interface
 - 1.1 When the new parameter type of addElement is TEDU_BOARD_ELEMENT_AUDIO or TEDU_BOARD_ELEMENT_GLOBAL_AUDIO, the element title can be set.
 - 1.2 getElementById When getting element data, a new field 'title' was added.
 - 1.3 Support transparency settings.
- New features
 - 1.1 Remote synchronization of educational tool element operation display screen.
- Bug and optimization handling
 - 1.1 Remote synchronization of educational tool element operation display screen.
 - 1.2 Other known issues optimization.

2.7.8.283 @ 2022-09-20

- New interface
 - 1.1 Enable multi-touch EnableMultiTouch
 - 1.2 Set modify signaling synchronization frequency, the allowable range of this value is [5, 20] SetSyncFps.
- Update Interface
 - 1.1 updateElementById adds a new position offset type
TEduElementOperatorType.CHANGE_POSITION
 - 1.2 setToolType API adds type: Coordinate System
TEDU_BOARD_TOOL_TYPE_COORDINATE
- Bug and optimization handling
 - 1.1 Optimize compass operation

- 1.2 Graphic fitting optimization
- 1.3 Other known issues optimization

2.7.7.278 @ 2022-09-01

- New interface
 - 1.1 Get element information GetElementById.
 - 1.2 Update element style UpdateElementById.
 - 1.3 Set highlighter color, brush color used for all highlighter drawings SetHighlighterColor.
 - 1.4 Get highlighter color GetHighlighterColor.
 - 1.5 Enable automatic graphic fitting during graffiti drawing EnablePenAutoFit.
 - 1.6 Set graphic style SetGraphStyle.
 - 1.7 Get graphic style GetGraphStyle.
- Add new error callback
 - 1.1 Add new error callback enumeration value
TEDU_BOARD_ERROR_SIGNATURE_EXPIRED (whiteboard signature expired).
- Deprecated Interface
 - 1.1 Deprecated SetLineStyle, please use SetGraphStyle.
 - 1.2 Deprecated GetLineStyle, please use GetGraphStyle.
- New features
 - 1.1 Add mathematical teaching tool compass.
 - 1.2 Add new geometric figures (Right Triangle, Isosceles Triangle, Parallelogram, Cube, Cylinder, Cone).
 - 1.3 Other Features
- Bug and optimization handling
 - 1.1 PPT page turning optimization.
 - 1.2 Other known issues optimization.

2.7.6 @ 2022.08.16

- New features
 - 1.1 Add mathematical teaching aids feature, supporting Ruler, Triangle, and Protractor.
 - 1.2 Add new retrieval of PPT notes feature.
- Bug Fix
 - 1.1 Other known issues have been fixed.

2.7.5 @ 2022.08.01

- New features
 - 1.1 PPT old version transcoding, supports mp3 and mp4 playback synchronization.
 - 1.2 PPT new version transcoding, supports mp3 and mp4 playback synchronization.
 - 1.3 Increase error and warning event reporting
- Bug and optimization handling
 - 1.1 Fix the issue where Host lacks protocol when retrieving resources.
 - 1.2 Other known issues have been fixed.

2.7.4.261 @ 2022-07-04

- New features
 - 1.1 Support MP3 and MP4 playback in the webview version of mini programs.
 - 1.2 Callback during courseware preloading, returns the preloading progress value.
- Adjust Event
 - 1.1 Add multimedia resource bitrate excessive alarm callback type (TEDU_BOARD_WARNING_IMAGE_MEDIA_BITRATE_TOO_LARGE)
- Bug Fix
 - 1.1 Eraser does not erase cleanly during fast movement, causing omissions.
 - 1.2 PPT transcoding issues, transcoded files are regarded as pad by the system, only respond to swipe page turning, do not respond to click events.
 - 1.3 Other known issues have been fixed.

2.7.3.258 @ 2022-06-07

- Adjust Initialization Parameters
 - 1.1 Under permission configuration, add customCursorIcon parameter: whether to customize mouse style, default false displays system built-in style, true customizes mouse style based on returned mouse position.
- Adjust Event
 - 1.1 When customizing mouse style, coordinate position callback (TEB_BOARD_CURSOR_POSITION), user customizes mouse style according to the position.
- New interface
 - 1.1 Whether to display local alias (setOwnerNickNameVisible), when set to false, pen part does not display own NickName.
- Optimize Historical Data Pull
 - 1.1 First frame rendering only pulls active whiteboard historical data.

1.2 When users turn pages, the operator will pull, corresponding whiteboard page historical data, and broadcast to other users in the room.

- Bug Fix

1.1 Other known issues have been fixed.

2.7.2.243 @ 2022-04-02

- Adjust Global Variables

1.1 Whiteboard error code increased TEDU_BOARD_ERROR_MAX_BOARD_LIMITED single classroom whiteboard page number has reached the limit.

- Feature Optimization

1.1 Upgrade whiteboard SDK

1.2 Known issues handling and optimization

2.7.1.242 @ 2022-02-25

- New interface

1.1 LoadCustomResource preload custom resources, support loading before and during the class.

- Modify interface

1.1 LoadTeduBoardResource adds courseware resource retention time.

- Feature Optimization

1.1 Upgrade whiteboard SDK

1.2 Known issues handling and optimization

2.7.0.241 @ 2022-01-23

- Feature Optimization

1.1 Upgrade whiteboard SDK

1.2 Known issues handling and optimization

2.6.9.240 @ 2021-12-31

- New interface

1.1 Support PPT courseware mute operation (soundMuteForPPT).

1.2 Courseware Resource Preloading, supports loading before and during class. For details, please refer to [Courseware Preloading Documentation](#).

- Feature Optimization

1.1 Optimized courseware loading.

1.2 The screenshot feature loses several pixels in abnormal dpr cases.

2.6.8.236 @ 2021-12-13

- New interface
 - 1.1 Jump to a specified animation step (gotoStep)
 - 1.2 Get whiteboard scroll position (getBoardScroll)
 - 1.3 Set whether to enable piecewise erasure mode (setPiecewiseErasureEnable)
 - 1.4 Get piecewise erasure mode status (isPiecewiseErasureEnable)
 - 1.5 Set eraser size (setEraserSize)
 - 1.6 Get eraser size (getEraserSize)
 - 1.7 Set global background image (setGlobalBackgroundPic)
 - 1.8 Get global background image (getGlobalBackgroundPic)
- Adjust Initialization Parameters
 - 1.1 Global background image (globalBackgroundPic)
- Adjust Interface
 - 1.1 Added whiteboard element (addElement) to support adding text elements (TEDU_BOARD_ELEMENT_TEXT)
- New Events
 - 1.1 Whiteboard move callback (TEB_BOARD_SCROLL_CHANGED)
- Adjust Event
 - 1.1 Box selection tool element selection callback (TEB_SELECTED_ELEMENTS) returns fields such as new element position, width and height, bounding box size.
- Feature Optimization
 - 1.1 Optimized image resource loading logic.
 - 1.2 Added rotation correction for image elements on lower versions.
 - 1.3 Added support for custom size of image elements.
 - 1.4 Supports segmented erasing of drawn lines.
- Bug Fix
 - 1.1 Optimized the issue in Android and Linux where text in PPT transcoding drops a few pixels.
 - 1.2 Inconsistent display of whiteboard element sizes at different zoom ratios.
 - 1.3 Jitter occurs due to precision error when drawing graffiti.
 - 1.4 Some known problems have been fixed.

2.6.7.233 @ 2021-10-27

- New interface

- 1.1 Set custom font (setTextFontFamily).
- 1.2 Add custom fonts (addTextFontFamily).
- 1.3 Get current used fonts (getTextFontFamily).
- Adjust Initialization Parameters
 - 1.1 Whether the remote brush is visible in brush mode (remoteCursorVisible).
- Adjust Interface
 - 1.1 Set remote pen visibility locally (setRemoteCursorVisible).
- Adjust Global Variables
 - 1.1 Whiteboard warning code (TEduBoardWarningCode), added alarm code for duplicate static PPT.
- Feature Optimization
 - 1.1 Graffiti synchronization in poor network environment.
 - 1.2 Optimize graffiti display effect.
 - 1.3 Residual process handling in rendering process.
- Bug Fix
 - Several known issues fixed.

2.6.6.232 @ 2021-10-12

- New interface
 - 1.1 setScrollBarVisible sets whether the whiteboard scrollbar is visible.
- Adjust Interface
 - 1.1 getFileInfo retrieves file information for a specified file in the whiteboard, returning the fileType field.
 - 1.2 getFileInfoList retrieves the list of file information for all files uploaded in the whiteboard, returning the fileType field.
 - 1.3 addH5File adds H5 page support title, needSwitch.
 - 1.4 addImagesFile batch imports images to whiteboard support title, needSwitch.
 - 1.5 addVideoFile adds video file support title, needSwitch.
- Adjust Global Variables
 - 1.1 TEduBoardFileType whiteboard file type.
- Feature Optimization
 - 1.1 Excessive graffiti causes rendering lag.
 - 1.2 Optimize log reporting logic.
 - 1.3 Increase network detection capability.
 - 1.4 Optimize SDK size.

1.5 Window SDK upgraded to CEF kernel (version 93).

- Bug Fix

1.1 Some known problems have been fixed.

2.6.5.224 @ 2021-09-17

- New interface

1.1 Set output log level (setLogLevel).

- Adjust Global Variables

1.1 Geometric Element Type (TEduBoardMathGraphType).

1.2 Log Level (TEduBoardLogLevel).

- Deprecated interfaces and events in the current version

1.1 SDK interface: Initiate file transcoding request (applyFileTranscode).

1.2 Callback Event: Transcoding progress callback (TEB_TRANSCODEPROGRESS).

1.3 Global Constants: File Transcoding Status (TEduBoardTranscodeFileStatus).

- Feature Optimization

1.1 Add support for various geometric shapes in geometry drawing board.

- Bug Fix

1.1 Some known problems have been fixed.

2.6.5.219 @ 2021-09-01

- New interface

1. Set output log level (setLogLevel).

- Adjust global variables

1. Geometric element type (TEduBoardMathGraphType).

2. Log level (TEduBoardLogLevel).

- Deprecated interfaces and events in current version

1. SDK interface: Initiate file transcoding request (applyFileTranscode).

2. Callback event: Transcoding progress callback (TEB_TRANSCODEPROGRESS).

3. Global constants: File transcoding status (TEduBoardTranscodeFileStatus).

- Feature Optimization

1. Add support for various geometric shapes in geometry drawing board.

- Bug fixes

1. Several Known Issues Fix.

2.6.5.218 @ 2021-09-01

- New interface
 1. Set output log level (setLogLevel).
- Adjust global variables
 1. Geometric element type (TEduBoardMathGraphType).
 2. Log level (TEduBoardLogLevel).
- Deprecated interfaces and events in current version
 1. SDK interface: Initiate file transcoding request (applyFileTranscode).
 2. Callback event: Transcoding progress callback (TEB_TRANSCODEPROGRESS).
 3. Global constants: File transcoding status (TEduBoardTranscodeFileStatus).
- Feature Optimization
 1. Add support for various geometric shapes in geometry drawing board.
- Bug fixes
 1. Several Known Issues Fix.

2.6.4.216 @ 2021-08-17

- Add interface
 - Add whiteboard (addBoard), allowing you to choose not to jump to the newly added whiteboard.
 - Group mode feature
 - Enable group mode (setClassGroupEnable)
 - Set group (setClassGroup)
 - Set group title (setClassGroupTitle)
 - Reset all groups (resetClassGroup)
 - Retrieve all group IDs (getAllClassGroupIds)
 - Retrieve group mode status (getClassGroupEnable)
 - Retrieve the group where the user belongs (getClassGroupIdByUserId)
 - Retrieve group information (getClassGroupInfoByGroupId)
 - Remove whiteboard from group (removeBoardInClassGroup)
 - Remove user from group (removeUserInClassGroup)
 - Delete group (removeClassGroup)
 - Add whiteboard to group (addBoardToClassGroup)
 - Add user to group (addUserToClassGroup)
 - Group switching (gotoClassGroupBoard)
- Others
 - Feature Optimization
 - Processing Known Issues

2.6.4.214 @ 2021-08-06

- Add interface
 - Set geometric shape type (setMathGraphType) for drawing geometric shapes in the geometry drawing board.
 - Set operation permissions in mouse mode (setMouseToolBehavior)
 - Set whiteboard remark information (setBoardRemark)
 - Retrieve whiteboard remark information (getBoardRemark)
- Add initialization parameters
 - Operation permissions in mouse mode (mouseToolBehavior)
 - Enable support for formula elements (formulaEnable)
- Add element type
 - Formula element (TEDU_BOARD_ELEMENT_FORMULA). This feature requires setting formulaEnable to true.
- Add global variables
 - Geometric element type (TEduBoardMathGraphType)
- Feature optimization
 - Support for graffiti point erasing.
 - Add support for various geometric shapes in geometry drawing board.
 - Add support for formula elements.
 - Optimization of video loading and playback logic.
 - Real-time synchronization display of graffiti drawing.
 - Optimize PPT resource loading retry logic.
 - Add local cache to improve resource loading speed.
- Bug fixes
 - Scrollbar jitter when the interactive whiteboard size changes.
 - Resetting animation steps of remote PPT when deleting files.
 - Display errors of remote graphics when custom graphic height is 0.
 - Several known issues fix.

2.6.3.213 @ 2021-07-23

- Add interface:
 - Set mouse tool behavior (setMouseToolBehavior).
- Optimization:
 - Other known issues and optimizations.

2.6.3.211 @ 2021-07-05

- Add interface:
 - Set pen auto-fitting mode (setPenAutoFittingMode).

- Adjust interface:
 - Add whiteboard (addBoard).
 - Support setting background H5 directly for new whiteboard.
- Add initialization parameters:
 - Offline warning time interval (offlineWarningTimeout).
- Add event:
 - Offline warning (TEB_OFFLINE_WARNING).
- Adjust event:
 - Add element callback (TEB_ADDELEMENT).
 - Add return value of element callback to include new element type type.
- Optimization:
 - Magic pen feature.
 - Support directly creating H5 background whiteboard.
 - Support whiteboard offline detection.

2.6.2.209 @ 2021-06-30

- Adjust interface
 - Add whiteboard elements (addElement).
- Adjust initialization parameters:
 - Initialization permission parameters mathGraphEnable, preload mathematical function image library.
 - Initialization configuration parameters scaleRange, whiteboard zoom range.
- New event:
 - Callback for elements selected by the marquee tool (TEB_SELECTED_ELEMENTS), deprecating the original callback event (TEB_RECTSELECTED).
 - Callback for math function graph tool events (TEB_MATH_GRAPH_EVENT).
 - Callback for remote whiteboard zoom and drag status (TEB_ZOOM_DRAG_STATUS).
- Deprecated interface
 - Deprecated add image element (addImageElement), please use add whiteboard element (addElement).
- Optimization:
 - Support math function graph display.
 - Support H5 element move, zoom, rotate.
 - Add element support for custom position, currently supports image element, H5 element, math function graph.
 - Mobile supports two-finger zoom on the whiteboard in any tool.

2.6.0. @ 2021-06-17

- New interface
 - 1.1 New interface to set proxy server (SetProxyServer).
 - 1.2 New interface to limit the number of layers erased by the eraser at once (SetEraseLayerLimit).
 - 1.3 New interface to limit the data types that can be erased by the eraser (SetEraseLayerType).
- Add Initialization Parameters
 - 1.1 proxyServer: Configure proxy server.
 - 1.2 syncFps: Signal synchronization frequency.

2.5.7.195 @ 2021-04-07

- Enumeration adjustment
 - 1.1 Adjust TEDU_BOARD_ERROR_PATH_INVALID enumeration.
 - 1.2 Adjust TEDU_BOARD_ERROR_WRITE_ERROR enumeration.
 - 1.3 Adjust TEDU_BOARD_WARNING_TRTC_INVALID enumeration.
 - 1.4 New TEDU_BOARD_WARNING_GRAFFITI_LOST enumeration.
 - 1.5 New TEDU_BOARD_WARNING_CUSTOM_GRAPH_URL_NON_EXISTS enumeration.

2.5.7.193 @ 2021-04-02

- New interface
 - 1.1 New interface to set file scale (SetFileScale).
 - 1.2 New interface to retrieve file scale (GetFileScale).
 - 1.3 New interface to limit the number of layers erased by a single click of the eraser (SetEraseLayerLimit).

2.5.7.191 @ 2021-02-25

- Bug Fix
 - 1.1 Re-register the IM message callback each time the whiteboard is created to avoid missing whiteboard messages due to IM reinitialization.

2.5.7.187 @ 2021-02-22

- New interface
 - 1.1 Add an interface to clean up the whiteboard SDK environment (ClearTEduBoardSDKEnv).

2.5.7.185 @ 2021-02-02

- New interface
 - Add an interface to move the whiteboard (SetScaleAnchor).
 - 1.1 Add an interface to show remote pen visibility during drawing (SetRemoteCursorVisible).
 - 1.2 Audio element – Set the volume level (SetAudioVolume).
 - 1.3 Audio element – Get the volume level (GetAudioVolume).
 - 1.4 Add an interface to set the zoom ratio for the scaling tool (SetScaleToolRatio).
 - 1.5 Add an interface to map primary and backup domain names for resources (AddBackupDomain).
 - 1.6 Add an interface to remove the mapping of primary and backup domain names for resources (RemoveBackupDomain).
- New Events
 - 1.1 Delete element event (onTEBRemoveElement).
- New initialization parameters:
 - 1.1 Add initialization parameters to disable the scaling feature of the moving tool (enableScaleTool).
- Optimization
 - 1.1 Add H5 PPT, image elements (imageElement)/image files (imagesFile), background images, videos, and other resources to support specifying primary and backup URLs. This requires the addition of the backup domain interface.
 - 1.2 Optimization of static PPT page turning interaction effects.
 - 1.3 Adjusted selection box style.
 - 1.4 Laser pen feature performance optimization.
- Bug Fix
 - 1.1 Issue with incorrect scaling ratio after image rotation.
 - 1.2 Chrome 88 version missing vertical scrollbar.
 - 1.3 Issue with exceptional scrolling triggered by the scrollbar.
 - 1.4 Incorrect selection box range when adding custom elements.
 - 1.5 Related issues with the Text Tool.
 - 1.6 Several other known issues.

2.5.6.183 @ 2021-01-27

- Bug Fix
 - Fixed occasional issue of lost received strokes.

2.5.6.177 @ 2020-12-16

- New interface:

- 1.1 Added whether to enable the native system cursor interface `SetSystemCursorEnable`.

- After enabling this feature, the Brush Icon and Laser Pointer Icon will use the system's cursor style, providing a slight smoothness improvement locally.
 - After enabling this feature, there will be a slight delay phenomenon with the Brush Icon and Doodling, which is normal.
 - After enabling this feature, the cursor might revert to the default mouse pointer on the Mac Terminal under certain circumstances, such as message pop-ups, which is normal.

- 1.2 Added `SetToolTypeTitle` interface for setting pen and laser pointer tool tips.

- 1.3 Support for audio elements

- Add audio `AddElement`
 - Play audio `PlayAudio`
 - Pause audio `PauseAudio`
 - Jump progress `SeekAudio`
 - Whether to enable the audio control panel `EnableAudioControl`

- New features:

- 1.1 Click and rectangle selection tools are merged.

- 1.2 Laser pointer and brush support for multiple persons.

- 1.3 Integrated new log module, support log reporting, optimized log format.

- Experience Optimization:

- 1.1 Optimized selection accuracy for the selection tool and eraser.

2.5.5.155 @ 2020.11.09

- New features:

- Add preset text content for text tool.
 - Optimized whiteboard scaling tool to support mouse wheel zoom, focus zoom, and reduced interaction method with the shift key.
 - Add custom graphic tools.
 - Add element types for custom graphics.
 - Scrollbar displayed after whiteboard enlargement.

- Bug Fix

- Fixed occasional pen non-disappearance bug.

2.5.4.152 @ 2020.10.15

- Added tool type
 - Added perfect circle and square tool classes; also supports using the Ellipse Tool and Rectangle Tool to draw perfect circles and squares by pressing the Shift key.
- Optimization
 - Optimized the inaccuracy issue of the Eraser Erase Arrow Tool.
- Bug Fix
 - Fixed the synchronization issue when simultaneously moving image elements on multiple ends.
 - Fixed known issues.

2.5.3.134 @ 2020.08.31

- Add Callback
 - Added video status callback TEDU_BOARD_VIDEO_STATUS_WAITING and TEDU_BOARD_VIDEO_STATUS_PLAYING.
- Bug Fix
 - Fixed the inconsistency issue of the laser pen display ratio on each end.
 - Fixed the occasional latency issue of whiteboard operations on the Mobile Terminal.
 - Fixed the micro-change issue of graffiti outside the whiteboard.
- Optimization
 - Continuous display during use of the desktop pen.
 - Callback on ERROR status after multiple video playback failures.
 - Related optimization of log reporting.

2.5.2.132 @2020.08.07

- Add Callback
 - Added H5 PPT Status Callback onTEBH5PPTStatusChanged.

2.5.1.123 @2020.07.27

- Supported Features
 - Image elements support arbitrary angle rotation and eight-directional scaling.
- Interface Optimization
 - When you call the deleteFile interface to delete a non-current file, it will not redirect to the default file #DEFAULT.
- bug fix
 - Fixed the issue where the text tool input process caused invisible entered text in some input methods.

- API changes
 - Added the needSwitch parameter to the addTranscodeFile interface, indicating whether to switch to the added file after adding.
- Kernel upgrade
 - Upgrade CEF version to 83.5.0+gbf03589
 - Upgrade Chromium kernel to 83.0.4103.106

2.5.0.119 @2020.07.2

- Feature changes
 - addVideoFile/addTranscodeFile/addImagesFile interfaces return the file ID when adding existing files.
 - Unified video playback control bar interface across platforms.
- Supported Features
 - Supported PPT hyperlink click synchronization feature.
- bug fix
 - Fixed the issue where erasing graffiti during the graffiti process caused graffiti synchronization issues.
 - Fixed the issue where adding video files in specific scenarios resulted in additional redundant whiteboards.
- Performance Optimization

2.4.9.118 @2020.06.15

- New interface
 - Initialize parameter windowBackgroundColor to set the background color of non-whiteboard areas.
- Bug Fix
 - Change the timeout time of AddTranscodeFile API to 2000 milliseconds to alleviate the file addition timeout problem.

2.4.9.115 @2020.06.10

- New interface
 - Add new whiteboard synchronization and refresh API SyncAndReload.
 - Add new whiteboard snapshot API Snapshot.
- Add Callback
 - Added onTEBSnapshot callback.
- Added error code

- TEDU_BOARD_ERROR_PATH_INVALID Invalid Path.
- TEDU_BOARD_ERROR_WRITE_ERROR File Writing Error.
- Bug Fix
 - Fixed the issue where frequent video operations caused permission disorder.
 - Resolved the issue where clicking the text tool at the bottom resulted in invalid input.
 - Fixed occasional residual issues when clearing
 - Adapt to IM 4.8.10 version enumeration value changes causing message sending and receiving exceptions.

2.4.8.108 @2020.05.21

- New interface
 - Added refresh interface to refresh the current whiteboard.
- Add Callback
 - TEduBoardImageStatus added TEDU_BOARD_IMAGE_STATUS_READ_ERROR.
 - Added refresh callback onTEBRefresh.
- Feature Optimization
 - Video file URL supports carrying signature information.
 - Optimized checkbox feature, allowing movement by clicking inside the box.
- Bug Fix
 - Fixed the issue where switching video caused progress errors.
 - Fixed laser pointer flickering issue.
 - Fixed laser pointer jumping issue.

2.4.7.106 @2020.04.30

- Bug Fix
 - Fixed the issue where IM signaling repeats sending a message every time.
- Performance Optimization
 - Optimized the process of rendering graffiti by others in the room.

2.4.6.94 @ 2020.04.02

- Add Callback
 - TEduBoardImageStatus has added three new status callbacks
 - TEDU_BOARD_IMAGE_STATUS_LOAD_ABORT Image loading interrupted.
 - TEDU_BOARD_IMAGE_STATUS_LOAD_TIMEOUT Image loading timeout.
 - TEDU_BOARD_IMAGE_STATUS_LOAD_CANCEL Image loading canceled.

- onTEBRectSelected Callback for the selection made by the selection tool
- New interface
 - TEduBoardInitParam adds two Parameters.
 - progressEnable Enable Loading Icon.
 - progressBarUrl Customize Loading Icon.
 - imageTimeout Image Loading Timeout.
- Bug Fix
 - Fixed the issue of no callback when loading the same image.

2.4.4.82 @ 2020.03.20

- Bug Fix
 - Fix the issue of API call failure when the input parameters contain special characters (single quotes, double quotes, and backslashes can cause issues).
 - Fix the issue of whiteboard page turning caused by file upload.

2.4.4.78 @ 2020.03.14

- Bug Fix
 - Fix the problem of Automatic Playback on the student side when playing video in the Whiteboard.
 - When Batch Import Image Group, limit the URL String Length to 7K; if it exceeds, return an Empty String and simultaneously Callback Error TEDU_BOARD_ERROR_DATA_TOO_LARGE.
 - Remove the redundant callback for onGotoBoard. In one PPT slide having multiple steps, only callback at the final or first step.

2.4.4.73 @ 2020.03.09

- Replace the Internal mp4 Player with videojs
- New interface
 - AddImagesFile Batch import images to the whiteboard.
 - SetHandwritingEnable Enable or disable the brush stroke feature.
 - IsHandwritingEnable Retrieve if the brush stroke is enabled on the whiteboard.
- Add Callback
 - onTEBAddImagesFile Callback for adding a batch of image files.
- Parameter modification
 - Default value of smoothLevel in TEduBoardInitParam changed to 0.
- Enumeration modification

- New value added to TEduBoardErrorCode: TEDU_BOARD_ERROR_AUTH_TIMEOUT Service Authentication Timeout, please make sure to handle this error.
- TEduBoardWarningCode Add
TEDU_BOARD_WARNING_IMAGESFILE_ALREADY_EXISTS
- Change TEDU_BOARD_VIDEO_STATUS_PLAYING to
TEDU_BOARD_VIDEO_STATUS_TIMEUPDATE

2.4.1.64 @ 2020.01.08

- Callback modification
 - onTEBFileUploadProgress callback parameter field changed to path.
 - onTEBFileUploadStatus callback parameter field changed to path.
- API changes
 - addImageElement Add Local Image supported.
- Added interface
 - Add a callback for adding image elements to onTEBAddImageElement

2.4.0.60 @2019.12.06

- Added interface supporting the video playback feature
 - Add a video file virtual const char *AddVideoFile(const char *url) = 0;
 - Show or hide the video control bar virtual void ShowVideoControl(bool show) = 0;
 - Play video virtual void PlayVideo() = 0;
 - Pause video virtual void PauseVideo() = 0;
 - Seek video virtual void SeekVideo(double time) = 0;
 - Whether to synchronize local video operations to the remote end virtual void SetSyncVideoStatusEnable(bool enable) = 0;
 - Schedule synchronization of video status to the remote end virtual void StartSyncVideoStatus(uint32_t interval) = 0;
 - Stop synchronization of video status virtual void StopSyncVideoStatus() = 0;
- Added interface supporting HTML5 page display feature
 - Add HTML5 page virtual const char *AddH5File(const char *url) = 0;
- Added interface supporting image element feature
 - Add image resource virtual void AddImageElement(const char * url) = 0;

2.3.5.27 @2019.10.30

- IM compatibility with version 4.5.x.
- Added animation step callback.

- Added courseware thumbnail retrieval interface.
- API changes:
 - class TEduBoardList renamed to class TEduBoardStringList
 - TEduBoardList::GetBoard renamed to TEduBoardStringList::GetString

2.3.4.18 @2019.09.29

- Fixed crash issue for large file uploads.

2.3.3.48 @2019.08.15

- Support for timestamp synchronization mechanism (used to cope with high-latency audio and video schemes)

2.3.2.46 @2019.08.13

- Block file drag event to prevent whiteboard unusable issue after page jump due to file drag-in.

2.3.2.45 @2019.08.07

- Avoid inconsistent styles across devices by using built-in fonts in the whiteboard, and remove related font settings interfaces and initialization parameters.
- Prohibit whiteboard operations during historical data loading and add illegal operation enumeration values.
- Added interface for adding transcoding files.
- Add line style setting interface and corresponding enumeration values.
- Add ellipse drawing mode setting interface and corresponding enumeration values.
- Update CEF and Chromium kernel version to 76.0.3809.87.

2.3.0.40 @2019.07.27

- Adjust whiteboard message priority to the highest.
- Fix the crash issue when the initialization parameters experimental field is empty.

2.3.0.36 @2019.07.12

- Update Chromium version for Windows and Linux to 75.0.3770.100.
- Adapt Windows and Linux to the new version of the CEF interface.
- Disable JS pop-up windows under off-screen rendering mode in Windows and Linux.
- Add an automatic retry option for whiteboard HTML load failures in Windows and Linux.
- Upload whiteboard HTML files to the cloud for Windows and Linux.

2.2.2.34 @2019.07.03

- Fix the abnormal issue with the whiteboard background image setting interface feature.

2.2.2.33 @2019.06.28

- Monitor Render process crashes and print logs.
- AddFile and AddH5PPTFile interfaces synchronously return file ID.
- File upload progress callback and file upload result callback return file ID parameter.
- Fix the crash issue caused by passing nullptr in some interface parameters.
- Fix the whiteboard delay display causing text tool unable to switch Chinese input method problem.

2.2.1.29 @2019.06.27

- Fixed an occasional issue where the API call returns nullptr

2.2.1.28 @2019.06.24

- Fix the problem of not receiving whiteboard initialization completion callback.
- Add and delete whiteboard callback changed to batch callback.
- Add initialization parameter to enable or disable SDK built-in loading icon.

2.2.0.21 @ 2019.06.20

- Support MP4 playback.
- Support disk cache.

Optimization

- Added a parameter to the paging interface to support whether to reset the number of animation steps (prevBoard, nextBoard, gotoBoard)
- Added a loading icon for historical data and resource loading
- Whiteboard preloading supports cross-file preloading
- Animation PPT supports direct loading to a specified page and step
- Fixed known bugs

New features

- Add interface to get file information by file ID getFileInfo.
- Error events add new historical data synchronization failure and whiteboard internal runtime error events.

2.1.0.16 @ 2019.06.12

- Support setting log file path.

2.1.0.15 @ 2019.05.30

- Fix the onTEBFileUploadStatus callback parameter exception issue.

2.1.0.14 @ 2019.05.29

- Support static PPT page preloading
- Ink optimization (pencil tool curve smoothing)
- Support data synchronization prohibition (do not sync local data to remote)
- Eraser tool supports swipe erasing.
- Throw warning when the added H5 PPT already exists.
- Support to set the aspect ratio of each whiteboard independently.
- Support whiteboard zoom and drag to view.

2.0.0.6 @ 2019.05.17

- Fix the issue of unable to initialize under Chinese path.

2.0.0.1 @ 2019.05.15

- Add mouse tool type TEDU_BOARD_TOOL_TYPE_MOUSE.
- Support setting H5 background.
- Whiteboard supports concurrent file uploads.

2.0.0_RC3 @ 2019.05.10

- Support setting text style and font attributes.
- Initialization interface supports passing all attribute initial values.
- Initialization supports setting whiteboard aspect ratio.
- `AddFile` interface supports passing COS transcoding URL.

2.0.0_RC2 @ 2019.05.08

1. New feature support:

- PPT animation display.

2. New service:

- PPT animation transcoding service.

3. Fixes

- Fix the problem of not receiving callbacks after CEF initialization when whiteboard repair is disabled.

2.0.0_RC1 @ 2019.04.26

- Doodling (Pencil, Eraser, Laser Pointer, Straight Line, Hollow Ellipse, Hollow Rectangle, Solid Ellipse, Solid Rectangle, Text)
- Background color, background image.
- Click, box selection, mobile graffiti, undo, redo.
- Whiteboard Zoom, Mobile.
- File display (Static: support PPT, PDF, WORD, EXCEL), multi-file support.

WeChat Mini Program

Last updated: 2024-12-23 10:40:21

It is recommended to use the web-view solution for integration, i.e., integration based on the Web SDK. Currently, due to the restrictions of mini-program component rules, using the native mini-program components to implement the whiteboard SDK lacks capabilities for PPT, scaling, moving, etc. Therefore, the native component solution is not recommended. [Click to view Web version information](#).

2.5.1 @ 2020.07.23

- [click Download SDK](#)
- Interface Optimization
 - If the fid parameter for the getFileBoardList and getFileInfo interfaces is missing, the default information of the current file will be returned.
 - The deleteFile interface will not switch to the default file #DEFAULT if deleting a non-current file.

2.5.0 @ 2020.07.2

- [click Download SDK](#)
- bug fix
 - Fixed the issue where erasing doodles during doodling caused doodles to be out of sync
- Performance Optimization

2.4.9 @ 2020.06.10

- [click Download SDK](#)
- New interface
 - Added the addAckData interface to confirm whether data has been sent successfully. After sending the TEB_SYNCDATA event data via the signaling channel, the interface can be called.
 - Added the syncAndReload whiteboard synchronization and refresh interface. Use this interface in conjunction with addAckData.
- Added file message type
 - The server's request valid domain name has added https://01-file-message.qcloudtiw.com.

- The server's uploadFile valid domain name has added https://01-file-message-1259648581.cos.ap-nanjing.myqcloud.com.

2.4.7 @ 2020.05.08

- [click Download SDK](#)
- Fixed known bugs
- Added offline logs
 - The server domain configuration needs to add https://aegis.qq.com.
 - The server domain configuration needs to add https://report-log-lv0.api.qcloud.com.
 - The server domain configuration needs to delete https://ilivelog.qcloud.com.

2.4.4 @ 2020.03.14

- When Batch Import Image Group, limit the URL String Length to 7K; if it exceeds, return an Empty String and simultaneously Callback Error TEDU_BOARD_ERROR_DATA_TOO_LARGE.

2.4.4 @ 2020.03.09

- First Screen Rendering Optimization
- Optimized PPT preloading
- Optimized doodle strokes

2.3.6 @ 2019.11.08

1. All transcoding resources are integrated into CDN, please upgrade.
2. Deprecated addFile, addH5PPTFile interfaces, deprecated TEB_ADDFILE, TEB_ADDH5PPTFILE events.
3. New applyFileTranscode, getFileTranscodeProgress, addTranscodeFile interfaces, new TEB_TRANSCODEPROGRESS, TEB_ADDTRANSCODEFILE events.

2.3.5 @ 2019.10.22

1. bug fix
 - Underlying adjustments of mini programs for canvas touch events not bubbling, causing issues with doodling.

2.3.4 @ 2019.09.25

1. Add polyfill

2.3.0 @ 2019.08.22

1. Known bugs are fixed.
2. Add webrtcroom + webview for Interactive Classroom.

Whiteboard Feature	[webrtcroom + canvas method] supported	[webrtcroom + webview method] supported	Description
Brush	✓	✓	
Eraser	✓	✓	
Laser pointer	✓	✓	
Line	✓	✓	
Hollow Ellipse	✓	✓	
Hollow Rectangle	✓	✓	
Solid Ellipse	✓	✓	
Solid Rectangle	✓	✓	
Background color	✓	✓	
Background Image	✓	✓	
H5 Background	✗	✓	
Click Selection	✓	✓	
Box Selection	✓	✓	
Undo	✓	✓	
Redo	✓	✓	

File Display	✓	✓	Supports PPT, PDF, WORD, EXCEL
File upload	✓	✓	Supports PPT, PDF, WORD, EXCEL, images
Animation H5PPT	✗	✓	
Zoom in	✗	✓	
Zoom out	✗	✓	
Dragging	✗	✓	
Initializing Whiteboard Ratio	✓	✓	
Text Input/Display	✗	✓	
Graffiti Smoothing Level	✓	✓	
Dynamically Setting Whiteboard Ratio	✗	✓	

2.1.0 @ 2019.06.25

1. Graffiti Drawing Performance Optimization
2. Support for Eraser Swipe Erasure
3. Support for File/Image Upload
4. Support for Whiteboard Ratio
5. Support for Setting Graffiti Smoothing Level

Whiteboard Feature	Supported	Description
Brush	✓	

Eraser	✓	
Laser pointer	✓	
Line	✓	
Hollow Ellipse	✓	
Hollow Rectangle	✓	
Solid Ellipse	✓	
Solid Rectangle	✓	
Background color	✓	
Background Image	✓	
H5 Background	✗	
Click Selection	✓	
Box Selection	✓	
Undo	✓	
Redo	✓	
File Display	✓	Supports PPT, PDF, WORD, EXCEL
File upload	✓	Supports PPT, PDF, WORD, EXCEL, Images
Animation H5 PPT	✗	
Zoom in	✗	
Zoom out	✗	
Dragging	✗	
Initializing Whiteboard Ratio	✓	
Text Input/Display	✗	
Graffiti Smoothing Level	✓	
Dynamically Setting Whiteboard Ratio	✗	

2.0.0_RC2 @ 2019.05.17

1. Bug Fix

- Solve the issue of vertical screen display after horizontal screen

2.0.0_RC1 @ 2019.05.15

1. New feature support:

- Audio and video communication
 - TRTC communication
- IM
 - Message
 - Group
 - Relationship Chain Management
- Whiteboard
 - Doodling (pencil, eraser, laser pointer, straight line, hollow oval, hollow rectangle, solid oval, solid rectangle)
 - Background color, background image.
 - Click, box selection, mobile graffiti, undo, redo.
 - File Display (Static: supports PPT, PDF, WORD, EXCEL), Multi-file Support.

TiwCache & TiwLogger

Last updated: 2026-03-26 11:38:59

TIWCache Version Information

iOS & Mac

1.0.0.89 @ 2022-07-05

- [click Download SDK \(iOS\)](#)
- [click Download SDK \(macOS\)](#)
- **Update Content**

1.1 [New] Added Courseware Download Progress Callback: `- (void)onTIWCacheCoursewareDownloading:(NSString *)zipUrl progress:(uint32_t)progress errMessage:(NSString *)errMsg;`

1.2 [New] Added File Download Progress Callback: `- (void)onTIWCacheFileDownloading:(NSString *)zipUrl progress:(uint32_t)progress errMessage:(NSString *)errMsg;`

Android

1.0.0.91 @ 2022-07-05

- [click Download SDK](#)
- **Update Content**

1.1 [New] Added Courseware Download Progress Callback: `public void onTIWCacheCoursewareDownloading(String zipUrl, int progress, String errMessage);`

1.2 [New] Added File Download Progress Callback: `public void onTIWCacheFileDownloading(String zipUrl, int progress, String errMessage);`

TIWLogger Version information

iOS & Mac

1.0.1.54 @ 2022-04-19

- [click Download SDK \(iOS\)](#)
- [click Download SDK \(macOS\)](#)
- **Update Content**

1.1 [Opt]Optimized Device Information Retrieval Logic due to Privacy Policy.

Android

1.0.1.77 @ 2022-05-11

- [click Download SDK](#)
- **Update Content**

1.1 [Opt]Do not specify JDK version during compilation.