

# **Zoom Mac SDK**

# **Modification History**

Revision	Date	Originator	Comments
1	8/10/2016	Zoom engineering	First version

Note that the mac SDK from Zoom is distributed under a separate SDK agreement. Please make sure that you read the terms and conditions of the SDK agreement before using the SDK. Please visit Zoom developer portal if you have questions.



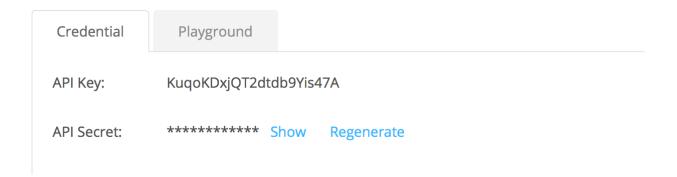
# 1 Introduction and Pre-Requisite

In order to use the SDK, you need to make sure that the RETS API and the mobile SDK is enabled in your account. If not, please contact your account rep or contact Zoom support. Our mac SDK is written in object C.

• Get the SDK key and secret from your zoom account. This key/sec is same as the one used for mobile SDK



• Get the REST API Key/Sec from your zoom account



• Call REST API "getbyemail" and this should return the user id and user token



# API Playground

API Endpoint:	https://api.zoom.us/v1/user/getbyemail
API Key: *	KuqoKDxjQT2dtdb9Yis47A
API Secret: *	ylQrZ6uPduFwZ2QpPyhtGawPytNqAEdKYdGd
Data Type:	• JSON    XML Clear
lser Email Address: *	abc@test.us
Login Type: *	● Work Email
Post Data:	View Source
1 ost bata.	

# 2 SDK Functions

## 2.1 SDK Initialization

Please follow the ZoomSDKSample.xcproject project that is part of our SDK bundle (AppDelegate.mm) and look at the initialization functions to find how to use ZoomSDK. Interfaces:

- 1) sharedSDK
  @return an ZoomSDK instance, e have done initialisation ourself.
- 2) setZoomDomain: (NSString\*) domain
   @param domain:set a web domain url you want to use.
- 3) getAuthService
  @return ZoomSDKAuthService instance, use this to call Auth fuction.
- 4) getMeetingService @return ZoomSDKMeetingService instance, use this to get meeting detail info and modify meeting UI.
- 5) getSettingService @return ZoomSDKSettingService instance, use this to configure the meeting setting.
- 6) getPremeetingService
  @return ZoomSDKPremeetingService instance, use this to
  schedule\list meeting.

## 2.2 Auth Service

Zoom SDK supports two options for user authentication.

- You can pass the user id of the user to the SDK initialization and all the meetings will start on that user's account. This is referred to as API user
- There are times it might be cumbersome to get the user id and you might want to distribute your app to all Zoom users in this case, you can ask the user to enter the



Zoom login credentials (username /password) in your app and then pass it to the SDK. This is referred to as normal user

Use ZoomSDKAuthService interface for the user authentication.

- 1) (ZoomSDKError)sdkAuth: (NSString\*)key appSecret: (NSString\*)secret
   @param key: your client key, also known as API key.
   @param secret: your client secret
   @return a error enum to tell the call result directly, and also can get a callback from its delegate.
- 2) (BOOL)isAuthorized
  @return a BOOL value to tell you the ZoomSDK is authed or not.
- 3) (ZoomSDKError)login:(NSString\*)userName
  Password:(NSString\*)password RememberMe:(BOOL)rememberMe;
  @param userName: your login user name
  @param password: password related to your username
  @param rememberMe: if you want to login automatically next time,
  set YES, or NO to not remember your password.
  @return a error enum to tell the call result directly, and also
  can get a callback onZoomSDKLogin from its delegate.
- 4) (ZoomSDKError)logout;
   @return a error enum to tell the call result directly, and also can get a callback onZoomSDKLogout from its delegate.
- 5) (ZoomSDKAccountInfo\*)getAccountInfo
   @return ZoomSDKAccountInfo object if call successfully.
   ZoomSDKAccountInfo interface:
   (NSString\*) getDisplayName
   return the display name of the login account.

### Callback from delegate:

- 1) (void) onZoomSDKAuthReturn: (ZoomSDKAuthError) returnValue
   @return a error enum to tell the auth process succefully or not.
- (void)onZoomSDKLogin:(ZoomSDKLoginStauts)loginStatus;
  @return a ZoomSDKLoginStauts enum to tell if client login
  successfully.

```
ZoomSDKLoginStauts enum:
ZoomSDKLoginStauts_Idle, // Not login yet
ZoomSDKLoginStauts_Processing, // Login in progress
ZoomSDKLoginStauts_Success, // Login Success
ZoomSDKLoginStauts Failed // Login Failed
```

3) (void) onZoomSDKLogout



## 2.3 Pre-Meeting Service

@param meetingItem the specified meeting user want to schedule.

ZoomSDKScheduleMeetingItem interface:

You can set follow property of ZoomSDKScheduleMeetingItem

NSString\* meetingTopic;

NSString\* meetingPassword;

time t meetingStartTime;

time t meetingDuration;

BOOL joinBeforeHost;

BOOL usePMI;

BOOL turnOffVideoForHost;

BOOL turnOffVideoForAttendee;

@return A ZoomSDKError to tell client whether the meeting has been scheudled successfully or not synchronously, also get callback onScheduleOrEditMeting from delegate asynchronously.

- 2) (ZoomSDKError)editMeeting:(ZoomSDKScheduleMeetingItem\*)meetingIte
   m MeetingUniqueID:(unsigned int)meetingUniqueID;
- Gparam meetingItem the user create to edit meeting.
  - @param meetingUniqueID the specified meeting Unique ID user want to edit.

@return A ZoomSDKError to tell client whether the meeting has been scheudled successfully or not synchronously.also get callback onScheduleOrEditMeting from delegate asynchronously.

- 3) (ZoomSDKError)deleteMeeting:(unsigned int)meetingUniqueID;
   @param meetingUniqueID the specified meeting Unique ID user want to
   delete.
   @return A ZoomSDKError to tell client whether the meeting has been
   deleted successfully or not synchronously, also get callback
   onDeleteMeeting from delegate asynchronously.
- 4) (ZoomSDKError)listMeeting

This method is used to list all meetings.

@return A ZoomSDKError to tell client whether list meeting action successfully or not synchronously, also get callback onListMeeting from delegate asynchronously.

5) - (ZoomSDKMeetingItem\*)getMeetingItem:(unsigned
int)meetingUniqueID;

@param meetingUniqueID the specified meeting Unique ID user want to
get.

@return A ZoomSDKMeetingItem object with meeeting info if function



```
call successfully.
ZoomSDKMeetingItem interface:
(BOOL)isPersonalMeeting;
(BOOL)isWebinarMeeting;
(BOOL)isRecurringMeeting;
(BOOL)isAllowJoinBeforeHost;
(BOOL)isUsePMIAsMeetingID;
(long long) getMeetingUniqueID;
(long long) getMeetingNumber;
(time_t) getMeetingStartTime;
(time_t) getMeetingDuration;
(NSString*) getMeetingTopic;
(NSString*) getMeetingPassword;
```

#### Callback from delegate:

```
1) - (void) onListMeeting: (ZoomSDKPremeetingError) error
    MeetingList: (NSArray*) meetingList
    @param error tell client related to this premeeting event whether
    list meeting success or not.
    @param meetingList A NSArray contains elements of ZoomSDKMeetingItem
```

- (void)onScheduleOrEditMeeting:(ZoomSDKPremeetingError)error
  MeetingUniqueID:(unsigned int)meetingUniqueID
  @param error tell client related to this premeeting event whether
  schedule or edit meeting successfully or not.
  @param meetingUniqueID the unique id of the meeting you schedule or
  edit.
- 3) (void)onDeleteMeeting:(ZoomSDKPremeetingError)error
   @param error tell client related to this premeeting event whether
   delete meeting successfully or not.

## 2.4 Meeting Service

After auth is successful, you can use ZoomSDKMeetingService to modify meeting and get meeting detail info.

## 2.4.1 Start, Join, Leave meeting interfaces

```
1) - (ZoomSDKError) startMeeting: (ZoomSDKUserType) userType
    userID: (NSString*) userId userToken: (NSString*) userToken
    displayName: (NSString*) username
    meetingNumber: (NSString*) meetingNumber
    isDirectShare: (BOOL) directShare
    sharedApp: (CGDirectDisplayID) displayID;
    @param userType: The userType depends on what the client account
    is, sdk user should use ZoomSDKUserType_APIUser or zoom user:
    ZoomSDKUserType ZoomUser
```



for api user userId\userToken\userNam\meetingNumber is requested,
but not need for ZoomSDKUserType ZoomUser

@param userId: The userId received as a result client user account
from Zoom site.

@param userToken: The userToken received as a result client user account from Zoom site.

@param username: The username will be used as display name in the Zoom meeting.

@param meetingNumber The meetingNumber may be generated from a scheduled meeting or a Personal Meeting ID, api user can't start instant meeting, if zoom user want to start a instant meeting, set meetingNumber to nil.

@param directShare: set YES client will start desktop share directly when meeting started.

@param displayID: set app display ID, client will start share this
app directly when meeting started.

 ${\tt @return}$  A ZoomSDKError to tell client whether the meeting started or not

callback: - (void) onMeetingReturn: (ZoomSDKMeetingError) error
internalError: (NSInteger) internalError

2) - (ZoomSDKError)joinMeeting:(ZoomSDKUserType)userType

toke4enfrocelogin: (NSString\*) toke4enfrocelogin
participantId: (NSString\*) participantId

meetingNumber: (NSString\*) meetingNumber

displayName: (NSString\*) username password: (NSString\*) pwd

isDirectShare: (BOOL) directShare

sharedApp: (CGDirectDisplayID) displayID;

@param userType: The userType depends on what the client account
is, sdk user should use ZoomSDKUserType\_APIUser or zoom user:
ZoomSDKUserType ZoomUser

for api user you can input parameter: toke4enfrocelogin\
participantId, but not permit for ZoomSDKUserType\_ZoomUser

 $\ensuremath{\texttt{@param}}$  toke4enfrocelogin: when join a meeting need login, this param is needed.

@param participateId

@param username The username will be used as display name in the Zoom meeting.

@param meetingNumber The meetingNumber used to join the meeting.
@param pwd, The meeting password which used to join the meeting,
if there does not exist meeting password, just set pwd to nil or
@"".

@param directShare: set YES client will start desktop share directly when meeting joined.

@param displayID: set app display ID, client will start share this
app directly when meeting joined.

 ${\tt @return}\ {\tt A}\ {\tt ZoomSDKError}$  to tell client whether can join the meeting or not



callback: - (void) onMeetingReturn: (ZoomSDKMeetingError) error
internalError: (NSInteger) internalError

3) - (void)leaveMeetingWithCmd: (LeaveMeetingCmd) cmd @param cmd, leave meeting by the command type, only host can user command LeaveMeetingCmd\_End to end meeting, or you can use LeaveMeetingCmd Leave to leave meeting.

## 2.4.2 Modify Meeting interface

### 2.4.2.1 Show, hide, move and minimize UI window in Meeting Interface

Use - (ZoomSDKMeetingUIController\*)getMeetingUIController in ZoomSDKMeetingService to get ZoomSDKMeetingUIController instance.

- (ZoomSDKError) showMeetingComponent: (MeetingComponent) component window: (NSWindow\*\*) window show: (BOOL) show InPanel: (BOOL) inPanel frame: (NSRect) componentFrame; @param component: a enum specify the meeting component window you want to modify. MeetingComponent MainWindow: main meeting window MeetingComponent Audio: audio window MeetingComponent Chat: chat window MeetingComponent Participants: participate list window MeetingComponent MainToolBar: toolbar at the bottom of main video window MeetingComponent ShareToolBar: toolbar at the top of sharing window MeetingComponent Setting: setting window @param window: you can set a NSWindow object, and it will be assigned value after the function call successfully, it only works when @param component select as follow enum: MeetingComponent MainWindow MeetingComponent Audio MeetingComponent Chat

 ${\tt MeetingComponent\_Participants}$ 

MeetingComponent Setting

@param show: set YES if you want to show this component window or No to hide.

@param inPanel: Just for Participants and chat window, set YES
the selected window will show in the left side of main window, set
No window will show independently.

@param rect: the frame of the component you want to show on screen.
Can be moved and resized Component: MainWindow



Just can be moved Component: the other components. @return A ZoomSDKError enum to tell client whether the meeting UI modify successfully or not synchronously.

2) (ZoomSDKError)enterFullScreen: (BOOL)fullScreen
firstMonitor: (BOOL)firstView DualMonitor: (BOOL)secondView
@param fullscreen: set YES to enter full screen or No to exit.
@firstView: Set YES if u want modify first screen or NO not to
modify.

 ${\tt @secondView:}$  Set YES if u want modify second screen or NO not to modify.

@return A ZoomSDKError enum to tell client whether enter or exit full screen successfully or not synchronously.

- 3) (ZoomSDKError) switchToVideoWallView @return A ZoomSDKError enum to tell client whether main video view switch to video wall view successfully or not synchronously.
- 4) (ZoomSDKError) switchToActiveSpeakerView;
  @return A ZoomSDKError enum to tell client whether main video view switch to active speaker view successfully or not synchronously.
- 5) (ZoomSDKError)minimizeShareFloatVideoWindow: (BOOL)bMin @param bMin: set YES to minimize the float video window when share, or NO to maximize. @return A ZoomSDKError enum to tell client whether minimize or maximize share float video window successfully or not synchronously.
- 6) (ZoomSDKError)moveFloatVideoWindow: (NSPoint) position
   @param position: the position you want the float video window move to when sharing.
   @return A ZoomSDKError enum to tell client whether move share float video window successfully or not synchronously.
- 7) (ZoomSDKError)switchFloatVideoToActiveSpeakerMode @return A ZoomSDKError enum to tell client whether shaer float video view switch to active speaker view successfully or not synchronously.
- 8) (ZoomSDKError)switchFloatVideoToGalleryMode @return A ZoomSDKError enum to tell client whether shaer float video view switch to gallery view successfully or not synchronously.

#### 2.4.2.2 Meeting configuration

Use - (ZoomSDKMeetingConfiguration\*)getMeetingConfiguration in ZoomSDKMeetingService to get ZoomSDKMeetingConfiguration instance.



You can use this to set some meeting configuration before meeting start.

1) (void) reset
 reset the meeting configuration.

Property: you can set follow property before you start meeting

1) app display ID for share

```
CGDirectDisplayID displayAppID;
  monitor ID for share
2)
    CGDirectDisplayID monitorID;
   FloatVideo position
 NSPoint floatVideoPoint;
4) Sharing ToolBar Visible
BOOL shareToolBarVisible;
5) Main video position
 NSPoint _mainVideoPoint;
6) waiting for host window visible
 BOOL _jbhWindowVisible;
7) mute on entry
 BOOL enableMuteOnEntry;
8) play chime or not
 BOOL enableChime;
9) direct share when start meeting or not
 BOOL isDirectShareDestop;
```

#### 2.4.2.3 Whiteboard Annotation

Use - (ZoomSDKAnnotationController\*)getAnnotationController in ZoomSDKMeetingService to get ZoomSDKAnnotationController instance. You can use this to control annotation in share whiteboard.

```
1) - (ZoomSDKError) setTool: (AnnotationToolType) type
    @ param type: select a tool to use.
        AnnotationToolType_None,
        AnnotationToolType_Pen,
        AnnotationToolType_HighLighter,
        AnnotationToolType_AutoLine,
        AnnotationToolType_AutoRectangle,
        AnnotationToolType_AutoEllipse,
        AnnotationToolType_AutoArrow,
        AnnotationToolType_AutoRectangleFill,
        AnnotationToolType_AutoEllipseFill,
        AnnotationToolType_SpotLight,
        AnnotationToolType_Arrow,
        AnnotationToolType_Arrow,
        AnnotationToolType_ERASER,
```



@return A ZoomSDKError enum to tell client whether set annotation tool successfully or not synchronously.

2) - (ZoomSDKError) clear: (AnnotationClearType) type

@param type: select a clear type to clear annotation.

AnnotationClearType\_All: clear all annotation in whiteboard AnnotationClearType\_Self: clear your annotation in whiteboard AnnotationClearType\_Other: clear other's annotation in Whiteboard

@return A ZoomSDKError enum to tell client whether clear annotation successfully or not synchronously.

- 3) (ZoomSDKError)setColor:(NSColor\*)color
   @param color: set color u want annotation to use
   @return A ZoomSDKError enum to tell client whether set color
   successfully or not synchronously.
- 4) (ZoomSDKError)setLineWidth: (long long)lineWidth
   @param lineWidth: set format line width u want annotation to use
   @return A ZoomSDKError enum to tell client whether set line width
   successfully or not synchronously
- 5) (ZoomSDKError) undo @return A ZoomSDKError enum to tell client whether revoke last annotation action successfully or not synchronously.
- 6) (ZoomSDKError) redo @return A ZoomSDKError enum to tell client whether not to revoke last annotation action successfully or not synchronously.

#### 2.4.2.4 other meeting actions

this contains interfaces about audio\video\share\chat\recording action, and get meeting detail info

#### Interfaces:



//remote control cmd
ActionMeetingCmd\_RequestRemoteControl,
ActionMeetingCmd\_GiveUpRemoteControl,
ActionMeetingCmd\_GiveRemoteControlTo,
ActionMeetingCmd\_DeclineRemoteControlRequest,
ActionMeetingCmd\_RevokeRemoteControl,
ActionMeetingCmd\_GetCurrentRemoteController,
//lock share cmd
ActionMeetingCmd\_LockShare,
ActionMeetingCmd\_UnlockShare,
//lower all hands
ActionMeetingCmd\_LowerAllHands,
//switch share mode
ActionMeetingCmd\_ShareFitWindowMode,
ActionMeetingCmd\_ShareFitWindowMode,
ActionMeetingCmd ShareOriginSizeMode,

@return A ZoomSDKError enum to tell client whether modify meeting action successfully or not synchronously.

- 2) (ZoomSDKError) sendChat: (NSString\*) content toUser: (unsigned int) userID
  - @param content, message content you want to send.
    @param userID, userID of the user you want to send chat to.
    @return A ZoomSDKError to tell client whether send message successful or not.
- 3) (ZoomSDKError)startRecording:(time\_t)startTimestamp
   saveFilePath:(NSString\*)filePath
   @param startTimestamp, start recording timestamp.
   @param filePath, the path u want to save recording file.
   @return A ZoomSDKError to tell client whether start recording
   successful or not.
- (ZoomSDKError) stopRecording: (time\_t) stopTimestamp
   @param stopTimestamp, start recording timestamp.
   @return A ZoomSDKError to tell client whether stop recording successful or not.
- 5) (ZoomSDKError)startAppShare:(CGWindowID)windowID
  displayID:(CGDirectDisplayID)displayID
  @param shareAppWindow, the app window u want to share.
  @return A ZoomSDKError to tell client whether start
  app share successful or not
  callback from delegate:
- 6) (ZoomSDKError) startMonitorShare: (NSString\*) monitorID @param monitorID, the indentity of the monitor u want to share. @return A ZoomSDKError to tell client whether start monitor share successful or not.
- 7) (ZoomSDKError) startAnnotation: (NSPoint) position @param position, the position of annotation first show.



@return A ZoomSDKError to tell client whether start annotation share successful or not.

- 8) (ZoomSDKError) stopAnnotation
   @return A ZoomSDKError to tell client whether stop annotation
   share successful or not
- 9) (ZoomSDKError)hideOrShowNoVideoUserOnVideoWall:(BOOL)hide @param hide: set YES if want hide no video user on wall view or NO to show.

 $\hbox{\tt @return A ZoomSDKError to tell client whether function call successfully or not }$ 

10) - (NSArray\*)getParticipantsList
 @return An array contains participant id.

11) - (ZoomSDKUserInfo\*)getUserByUserID:(unsigned int)userID
 @param userID, userID of the selected user.
 @return A user info interface when function call successful, or
 return nil when failed.

ZoomSDKUserInfo interfaces:

- (NSString\*)getUserName user name of user - (NSString\*)getEmail email of user

- (unsigned int)getUserID userid of user

- (BOOL)isHost; user is host or not user's video is on or not

- (BOOL) isAudioMuted user's audio is muted or not

12) - (NSString\*)getMeetingProperty: (MeetingPropertyCmd)command @param command, user command to get differnt property.

MeetingPropertyCmd\_Topic,
MeetingPropertyCmd\_InviteEmailTemplate,
MeetingPropertyCmd\_InviteEmailTitle,

MeetingPropertyCmd\_JoinMeetingUrl, @return A meeting configuration when function call successful, or return nil when failed.

13) - (ZoomSDKConnectionQuality\*)getConnectionQuality
@return A enum that discribe the Connection Quality when function
call successful.

ZoomSDKConnectionQuality\_Unknow,
ZoomSDKConnectionQuality\_VeryBad,
ZoomSDKConnectionQuality\_Bad,
ZoomSDKConnectionQuality\_NotGood,
ZoomSDKConnectionQuality\_Normal,
ZoomSDKConnectionQuality\_Good,
ZoomSDKConnectionQuality\_Excellent,

14) - (ZoomSDKMeetingStatus) getMeetingStatus



//Meeting Ended
ZoomSDKMeetingStatus Ended = 7,

- 15) (ZoomSDKError)getCurrentRemoteController:(unsigned int\*)userID @param userID, input a unsigned int\* value to this function if fuction call successfully will set the userset id of current remote controller in userID.

  @return A enum that discribe function call successful or not.
- 16) (ZoomSDKError)enableMuteOnEntry: (BOOL)bEnable
  @param bEnable, set YES to mute attendee when they join meeting.
  @return A enum that discribe function call successful or not.
  Make sure call this function after u get meeting status change:
  ZoomSDKMeetingStatus AudioReady.
- 17) enablePlayChimeWhenEnterOrExit:(BOOL)bEnable
  @param bEnable, set YES to play chime when user join or leave
  meeting. But the first attendee join meeting will always play
  chime for echo test, so this will take effect from the second
  attendee.
  @return A enum that function call successful or not.

## 2.4.3 Callback from delegate

Callbacks used to mention status change of chat\video\audio\share\recording\meeting You should inherit the ZoomSDKMeetingServiceDelegate and implement each interface if you want to monitor those notifications

```
1) - (void) onMeetingReturn: (ZoomSDKMeetingError) error
   internalError: (NSInteger) internalError
   @param error: tell client related to this meeting event.
       ZoomSDKMeetingError Success
       //Network Unavailable
      ZoomSDKMeetingError NetworkUnavailable
                                                    = 1,
      //Reconnect Fail
      ZoomSDKMeetingError ReconnectFailed
                                                    = 2,
      // MMR Erorr
      ZoomSDKMeetingError MMRError
                                                    = 3,
      // Password Error
      ZoomSDKMeetingError PasswordError
                                                     = 4,
       // Create Seession Error
      ZoomSDKMeetingError SessionError
                                                     = 5,
       //Meeting is over
      ZoomSDKMeetingError MeetingOver
                                                    = 6,
       //Meeting haven't start
      ZoomSDKMeetingError MeetingNotStart
                                                    = 7,
       //Meeting does not exist
      ZoomSDKMeetingError MeetingNotExist
                                                    = 8,
      //User is Full
      ZoomSDKMeetingError UserFull
                                                    = 9,
       //Client Version less than Min Version
                                                     = 10,
       ZoomSDKMeetingError ClientIncompatible
```



```
//No MMR ready for service
    ZoomSDKMeetingError NoMMR
                                                  = 11,
    //Meeting has been locked
    ZoomSDKMeetingError MeetingLocked
                                                  = 12,
    //Meeting Restricted
    ZoomSDKMeetingError MeetingRestricted
                                                  = 13,
    //JBH Meeting Restricted
    ZoomSDKMeetingError MeetingJBHRestricted
    //Failed to send create meeting command to our web server. HTTP
 post fail
    ZoomSDKMeetingError EmitWebRequestFailed
                                                    = 15,
    //identity token send from client expired
    ZoomSDKMeetingError StartTokenExpired
                                                    = 16,
    ZoomSDKMeetingError_VideoSessionError
                                                    = 17,
    ZoomSDKMeetingError AudioAutoStartError
                                                    = 18,
    ZoomSDKMeetingError RegisterWebinarFull
                                                    = 19,
    //Webinar
    ZoomSDKMeetingError RegisterWebinarHostRegister = 20,
    ZoomSDKMeetingError RegisterWebinarPanelistRegister = 21,
    ZoomSDKMeetingError RegisterWebinarDeniedEmail = 22,
    ZoomSDKMeetingError RegisterWebinarEnforceLogin
    //ZC certificate changed
    ZoomSDKMeetingError ZCCertificateChanged
                                                   = 24,
    //Failed to write to config file
    ZoomSDKMeetingError ConfigFileWriteFailed
                                                    = 50,
    //Unknown error
    ZoomSDKMeetingError Unknown
                                                  = 100,
@param internalError Zoom internal error code
- (void) onMeetingStatusChange: (ZoomSDKMeetingStatus) state
 @param state tell client meeting state change.
    //Idle
    ZoomSDKMeetingStatus Idle = 0,
    //Connecting
    ZoomSDKMeetingStatus Connecting = 1,
    //waiting for the host
    ZoomSDKMeetingStatus WaitingForHost = 2,
    //In Meeting
    ZoomSDKMeetingStatus InMeeting
    //Disconneting
    ZoomSDKMeetingStatus Disconnecting = 4,
    //Reconnecting
    ZoomSDKMeetingStatus Reconnecting
                                       = 5,
    //Connect Failed
    ZoomSDKMeetingStatus Failed
                                      = 6,
    //Meeting Ended
    ZoomSDKMeetingStatus Ended
    ZoomSDKMeetingStatus AudioReady
                                       =8
```

3) (void) onUserAudioStatusChange: (NSArray\*) userAudioStatusArray
 @param userAudioStatusArray a array contains
 ZoomSDKUserAudioStauts elements tell client audio stauts change
 of each user.

ZoomSDKUserAudioStauts interfaces:



```
- (unsigned int)getUserID;
     - (ZoomSDKAudioStatus) getStatus
       ZoomSDKAudioStatus None,
       ZoomSDKAudioStatus Muted,
       ZoomSDKAudioStatus UnMuted,
       ZoomSDKAudioStatus MutedByHost,
       ZoomSDKAudioStatus UnMutedByHost,
       ZoomSDKAudioStatus MutedAllByHost,
       ZoomSDKAudioStatus UnMutedAllByHost,
     You can use this
     for (ZoomSDKUserAudioStauts* key in userAudioStatusArray) {
          unsigned int userID = [key getUserID];
          ZoomSDKAudioStatus status = [key getStatus];
       }
    - (void) on ChatMessageNotification: (ZoomSDKChatInfo*) chatInfo
    @param chatInfo tell client the info of the chat message info user
    received, you can get each info from its interface
    ZoomSDKChatInfo interfaces:
    - (unsigned int)getSenderUserID;
    - (NSString*)getSenderDisplayName;
    - (unsigned int)getReceiverUserID;
    - (NSString*)getReceiverDisplayName;
    - (NSString*)getMsgContent;
    - (time t)getTimeStamp;
   - (void) onRecord2MP4Done: (BOOL) success Path: (NSString*) recordPath
   @param success tell client the conversion finish successfully or
   @param recordPath tell client the mp4 file path.
  - (void) onRecord2MP4Progressing: (int) percentage
    @param percentage tell client the process record convert to mp4
7) - (void) onRecordStatus: (ZoomSDKRecordingStatus) status
    @param status tell client record status.
8) - (void) onUserJoin: (NSArray*) array
   @param array tell client the joined user array, contains userid
   (unsigned int)
  - (void) onUserLeft: (NSArray*) array
   Oparam array tell client the left user array, contains userid
    (unsigned int)
10) - (void) onRemoteControlStatus: (ZoomSDKRemoteControlStatus) status
   User: (unsigned int) userID
     @param status the remote controll user's status.
     @param userID the remote controll user's identity.
       ZoomSDKRemoteControlStatus None,
       //you can request other screen remote control right
       ZoomSDKRemoteControlStatus_CanRequest,
       //other decline the remote control request
       ZoomSDKRemoteControlStatus Decline,
       //other accept the remote control request
       ZoomSDKRemoteControlStatus Accept,
       //you give up the remote control right of other's screen
       ZoomSDKRemoteControlStatus GiveUp,
       //you receive the remote control request
```



ZoomSDKRemoteControlStatus Request,

11) - (void)onSharingStatus:(ZoomSDKShareStatus)status User:(unsigned
int)userID

@param status the sharing user's status.
@param userID the sharing user's identity.

## 2.5 Setting Service

Use - (ZoomSDKSettingService\*)getSettingService to get ZoomSDKSettingService instance, and and modify meeting setting.

#### Interfaces:

1) - (NSArray\*)getCameraList

@return a array contains CameraInfo element.

CameraInfo Interfaces:

- (NSString\*)getDeviceID, device ID of camera
- (NSString\*)getDeviceName; device name of camera
- (BOOL)isSelectedDevice; is the camera has been selected or not
- 2) (ZoomSDKError) selectCamera: (NSString\*) deviceID

@param deviceID, the device indentity of camera you want select.
@return A ZoomSDKError to tell client whether select camera
successfully or not.

3) - (ZoomSDKError)setRecordingPath:(NSString\*)path
 @param path, the default recording path you want to set.
 mode.

 $\hbox{\tt @return A ZoomSDKError to tell client whether function call successfully or not }$ 

4) - (ZoomSDKError)enableMeetingSetting:(BOOL)enable
 SettingCmd:(MeetingSettingCmd)cmd;

 $\mbox{\tt @param}$  enable, set YES to enable, or NO to disable the specific setting.

@param cmd, MeetingSettingCmd enum contains the setting choices
you want to modify.

MeetingSettingCmd\_DualScreenMode,

MeetingSettingCmd AutoJoinAudio,

MeetingSettingCmd AeroModeInShare,

MeetingSettingCmd AutoFitToWindowWhenViewShare,

MeetingSettingCmd AutoFullScreenWhenJoinMeeting,

 ${\tt @return\ A\ ZoomSDKError\ to\ tell\ client\ whether\ function\ call\ successfully\ or\ not.}$ 



Place ZoomSDK folder in the same directory as ZoomSDKSample.xcodeproj



Sample.APP will be created in Bin/Realse folder.