



## **Introduction**

Zoom offers a web based HTML5 client that is used in environments where the end users cannot download zoom desktop clients due to internal IT restrictions or in very low bandwidth environments. The web client lets end users join a meeting, receive screen share from other attendees, join the meeting through the phone and leave the meeting. Zoom has added a JS SDK as part of our developer platform to enable developers to embed this into their web apps. Key functions that are exposed include: init meeting config, join meeting, show/hide invite function, show/hide meeting header, get attendees list, call out, invite by phone, mute, unmute, mute all, unmute all, rename, expel, record, lock meeting, leave meeting, end meeting.

A key point to note, with our JS SDK is that it serves as an attendee only platform, i.e. users are only able to join meetings, there is no ability of hosting a meeting or joining a meeting as a host. Audio capabilities can be leveraged by calling into the meeting. The SDK has an added layer of security through a ‘*signature*’; the signature is a unique value obtained through a hashing function with a combination of apiKey, apiSecret and meetingID. A unique signature is required for each meeting and each signature is valid for 24 hours.

## **Loading Zoommtg.js**

Include the following:

```
<script src=" https://d24cgw3uvb9a9h.cloudfront.net/static/90077/js/api/zoommtg.js"></script>
```

## **Supported Browsers**

The SDK is currently support in: Internet Explorer 10+, Google Chrome, Safari, and Mozilla Firefox with their latest version



## JavaScript API Methods

The following methods are available in the library, and all interfaces are called by the Zoommtg object. The argument is an object. In addition to the parameters that each interface needs to pass, there are the following general parameters:

Success: The callback function gets executed when the interface call succeeds

Error: The callback function executed when interface call fails

### **Success response sample:**

Object {method: "showMeetingHeader", status: true, errorCode: 0, errorMessage: null, result: null} // status is true

### **Error response sample:**

Object {method: "rename", status: false, errorCode: 3003, errorMessage: null, result: null} // status is false

### **Error codes**

SUCCESS: 0,

FAIL: 1,

ERROR\_NOT\_HOST: 3003, // not meeting host; certain functionalities require host access

WRONG\_MEETING\_PASSWORD: 3004, //wrong meeting password

MEETING\_NOT\_START: 3008 //meeting not started

## ● **Init Zoom Meeting Config**

Method required for initializing the SDK.

Parameters	Must Have?	Default	Description
Debug	N	False	Turn on debug mode can print log in browser console log
leaveUrl	Y		Redirect to this page after leaving a meeting , example "http://www.zoom.us"

### **Response:**

Object {debug: true, leaveUrl: "http://www.zoom.us"}

**Sample:**

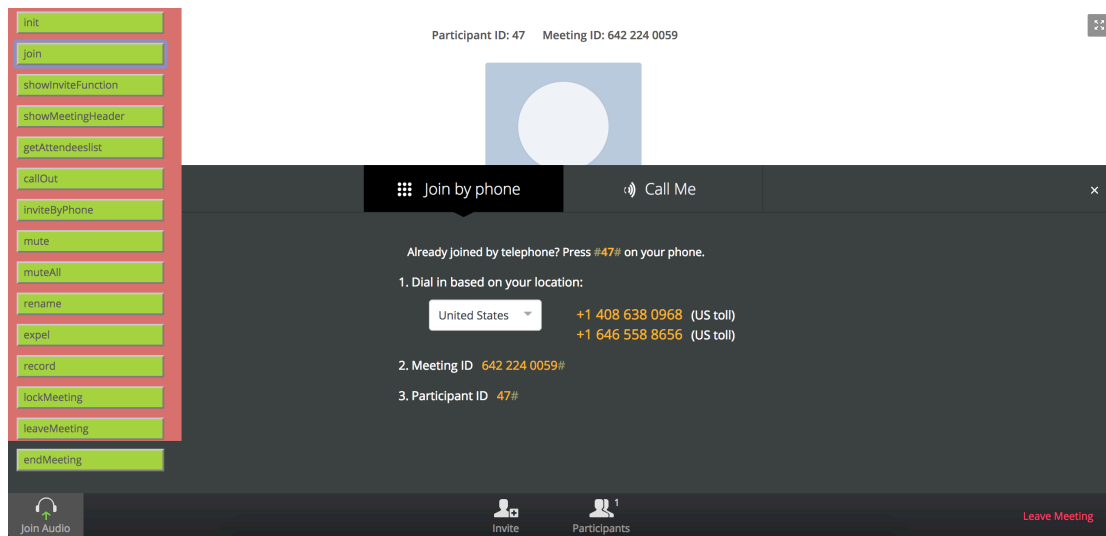
```
Zoommtg.init({
  debug: false,
  leave url: '',
  success: function(res){}
  error: function(res){}
})
```

**● Join meeting**

Method call for joining a meeting through the SDK. Note that the signature is valid only for 24 hours – Zoom meetings last only for 24 hours for security reasons.

Parameters	Must Have?	Default	Description
meetingNumber	Y		Zoom meeting number
userName	Y		Your name in meeting
passWord	N	''	Meeting password, if no password, set ''
apiKey	Y		REST APIS Credential API key
signature	Y		Security signature verification <a href="#">Refer to appendix 1 for code</a>

```
ZoomMtg.join({
  meetingNumber: 123456789,
  userName: 'JSAPI-user',
  passWord: '',
  signature: '',
  apiKey: '',
});
```



The screenshot above shows the initial UI once you join into the meeting after initialization. As mentioned previously, you need to call in or join by phone if you would like to leverage audio.

## ● Show/hide invite function

Method call allowing UI customization, disables and hides “Invite” button from the meeting UI.

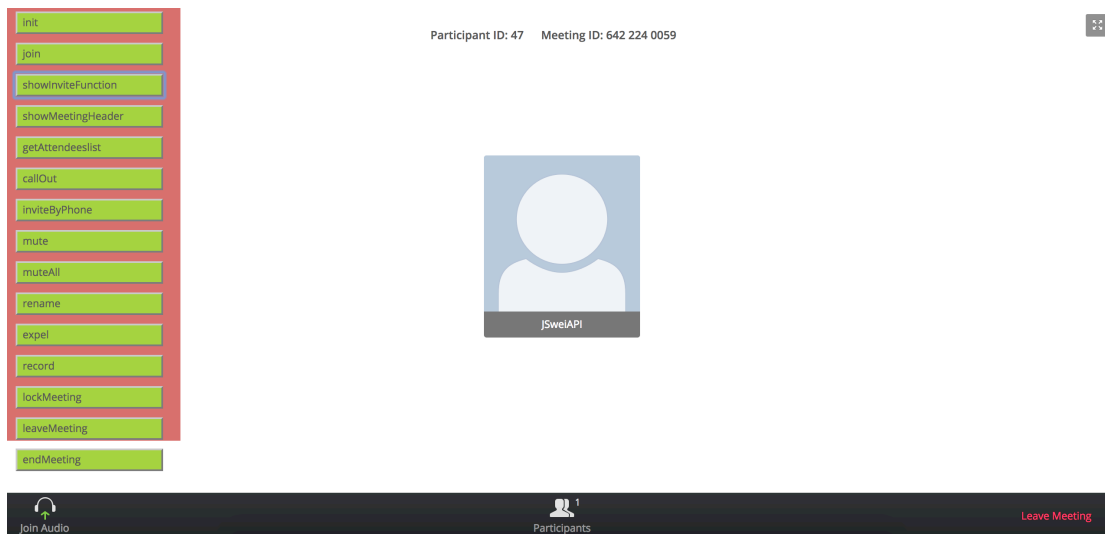
Parameters	Must Have?	Default	Description
Show	Y		If hide, the invite function will not be able to use

### Response:

Object {method: "showInviteFunction", status: true, errorCode: 0, errorMessage: null, result: null}

### Sample:

```
ZoomMtg.showInviteFunction({  
  Show: false  
})
```



As shown above the invite element is no longer in the UI.

## ● Show/hide meeting header

Method call to customize meeting UI; hides the header from the meeting UI

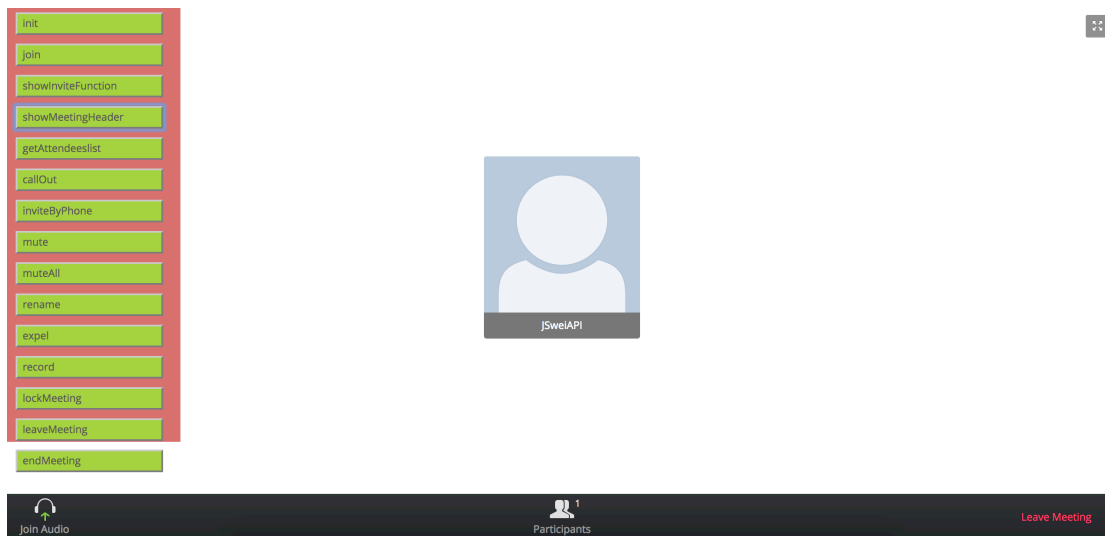
Parameters	Must Have?	Default	Description
Show	Y		Show or hide the meeting header, include meeting number and topic.

### Response:

Object {method: "showMeetingHeader", status: true, errorCode: 0, errorMessage: null, result: null}

### Sample:

```
ZoomMtg.showMeetingHeader ({  
  Show: false  
})
```



As shown above the header consisting of participant and meeting ID is no longer visible in the UI.

## ● Get current attendees list

This method is used to acquire list of participants in the meeting, the array of participant list can be parsed from the response.

No required parameters

### Response:

Object {method: "getAttendeeslist", status: true, errorCode: 0, errorMessage: null, result: Object}

### Sample:

```
ZoomMtg. getAttendeeslist ({})
```

## ● Call out

The method invites you to join the meeting by phone

Parameters	Must Have?	Default	Description
phoneNumber	Y		Phone number

Response:

Object {phoneNumber: "+8618625244063", success: function, error: function}

Sample

```
ZoomMtg.callOut({  
  phoneNumber: '+1234567'  
});
```



## ● Invite user by phone

The method invites another user to join the meeting by phone

Parameters	Must Have?	Default	Description
phoneNumber	Y		Phone number
userName	Y		User name

Response:

Object {phoneNumber: "", userName: "eason", success: function, error: function}

Sample:

```
ZoomMtg. inviteByPhone ({  
  phoneNumber: '+1234567',  
  userName: 'eason'  
});
```

## ● Mute/unmute

The method allows muting and unmuting your audio in the meeting

Parameters	Must Have?	Default	Description
userId	Y		User id
mute	Y		Mute:true, mute Mute:false, unmute

**Response:**

Object {method: "mute", status: true, errorCode: 0, errorMessage: null, result: null}

**Sample:**

```
ZoomMtg. mute ({  
  phoneNumber: '+1234567',  
  userName: 'eason'  
});
```

## ● Mute/Unmute all

The method allows *meeting host* to mute and unmute audio in the meeting

\*Only host has permission of this method



Parameters	Must Have?	Default	Description
muteAll	Y		Muteall:true, mute all Muteall:false, unmute all

**Response:**

Object {method: "muteAll", status: true, errorCode: 0, errorMessage: null, result: null}

**Sample:**

```
ZoomMtg.mute ({  
  phoneNumber: '+1234567',  
  userName: 'eason'  
});
```

## ● Rename

This method allows host to change the username of another participant.

\*Only host has permission of this method

Parameters	Must Have?	Default	Description
userId	Y		User id
oldName	Y		Old user name
newName	Y		New user name

**Response:**

Object {method: "rename", status: true, errorCode: 0, errorMessage: null, result: null}

**Sample:**

```
ZoomMtg.rename({  
  userId: 16797696,  
  oldName: 'eason',  
  newName: 'client',  
});
```

## ● Expel user

This method allows the host to kick a user from the meeting.

\*Only host has permission of this method

Parameters	Must Have?	Default	Description
userId	Y		User id

**Response:**

Object {method: "expel", status: true, errorCode: 0, errorMessage: null, result: null}



**Sample:**

```
ZoomMtg.rename({  
  userId: 16797696  
});
```

## ● Record meeting

Allows the host to enable recording in the meeting.

\*Only host has permission of this method

Parameters	Must Have?	Default	Description
record	Y		Record:true, start recording Record:false, stop recording

**Response:**

Object {method: "record", status: true, errorCode: 0, errorMessage: null, result: null}

**Sample:**

```
ZoomMtg.record({  
  record: true  
});
```

## ● Lock meeting

This method allows the user to lock the meeting; no more users can join this meeting.

\*Only host has permission of this method

Parameters	Must Have?	Default	Description
lockMeeting	Y		lockMeeting :true, lock meeting lockMeeting :false, unlock meeting

**Response:**

Object {method: "lockMeeting", status: true, errorCode: 0, errorMessage: null, result: null}

**Sample:**

```
ZoomMtg.lockMeeting ({  
  lockMeeting: true  
});
```

## ● Leave meeting

Method called to leave the current meeting.

No required parameters

**Response:**



Object {method: "leaveMeeting", status: true, errorCode: 0, errorMessage: null, result: null}

**Sample:**

```
ZoomMtg. leaveMeeting({});
```

## ● End meeting

Method call enabling host to end current meeting.

\*Only host has permission of this method

**Response:**

Object {method: "endMeeting", status: true, errorCode: 0, errorMessage: null, result: null}

**Sample:**

```
ZoomMtg. endmeeting({});
```

## Appendix 1 Generate signature

Java code sample:

```

/*
 * signature = encodeBase64URLSafeString(api key + "." + meetingNumber + "." + ts + "." + role
 * + "." + encodeBase64String(HmacSha256(data, key)))
 * data = apiKey + meetingNumber + ts + role
 * key = apiSecret
 * */
public static String generateJSSDKSignature(){
    String signature = "";
    String apiKey = "";
    String apiSecret = "";
    Long meetingNumber = 988405496L;
    Long ts = System.currentTimeMillis();
    int role = 1;

    byte[] hash;
    byte[] data = new byte[0];
    try {
        data = Base64.encodeBase64((apiKey + meetingNumber + ts +
role).getBytes("UTF-8"));
        hash = Crypto.hmacSha256(data, apiSecret.getBytes("UTF-8"));
        String s = apiKey + "." + meetingNumber + "." + ts + "." + role + "." +
Base64.encodeBase64String(hash);
        signature = Base64.encodeBase64URLSafeString(s.getBytes("UTF-8"));
        System.out.println("signature>>>" + signature);
    } catch (UnsupportedEncodingException e) {
        logger.error("[generateJSSDKSignature]Failed to encode base 64");
        return "";
    }
    return signature;
}

```



## Appendix 2 Application example

```
<html>
<head>
  <title>zoom web client</title>
  <link type="text/css" rel="stylesheet" href="/css/bootstrap.css"/>
  <link type="text/css" rel="stylesheet" href="/css/react-select.css"/>
</head>
<body>
  <div class="main">
    <div id='root'>
      </div>
    </div>

    <script src="/lib/react.min.js"></script>
    <script src="/lib/react-dom.min.js"></script>
    <script src="/lib/redux.min.js"></script>
    <script src="/lib/redux-thunk.min.js"></script>
    <script src="/lib/jquery.min.js"></script>
    <script src="/lib/jquery.i18n.js"></script>
    <script src="https://d24cgw3uvb9a9h.cloudfront.net/static/90077/js/api/zoommtg.js"></script>
    <script src="/js/customer.js"></script>
  </body>
</html>
```