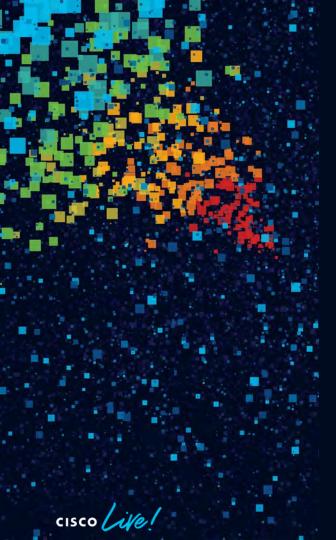
Elevating 'face-to-face' into the Cisco Collaboration Cloud

Embedding Webex features into web and mobile apps

Adam Weeks, Technical Leader, Webex for Developers



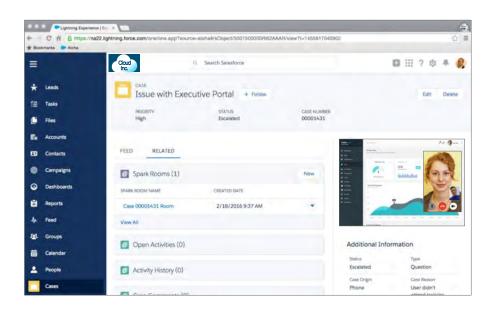




Agenda

- Introduction
- Webex Integrations
- Webex Widgets
- Webex Javascript SDK
- Webex iOS SDK
- Webex Android SDK
- Conclusion

How do we enable face to face meetings in our existing business apps?









What can you build on Webex?

One powerful platform. One revolutionary team experience.

So many opportunities for developers like you to get involved. How will you leave your mark on Webex?

https://developer.webex.com



Cisco Webex for Developers

Documentation

Blog

Support



OVERVIEW

Platform Introduction

Bots

Integrations

Widgets

Guest Issuer

Platform Introduction

If you've used Cisco Webex you know just how easy it is to meet and collaborate with your team members and customers. The Cisco Webex for Developers program opens up the power of the Webex Platform to anyone seeking to extend the Webex experience.



Adam Weeks adweeks@cisco.com

My Webex Apps

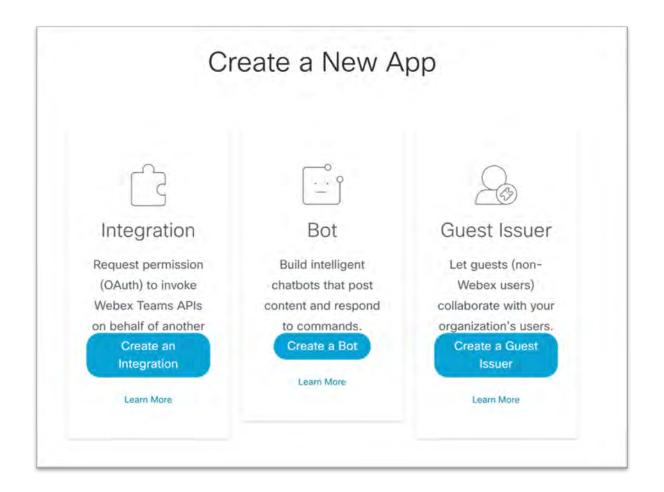
Log out

Sharing your Webex

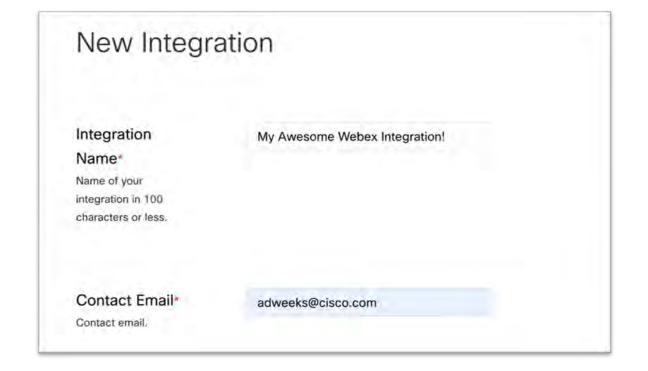
My Apps

Create a New App













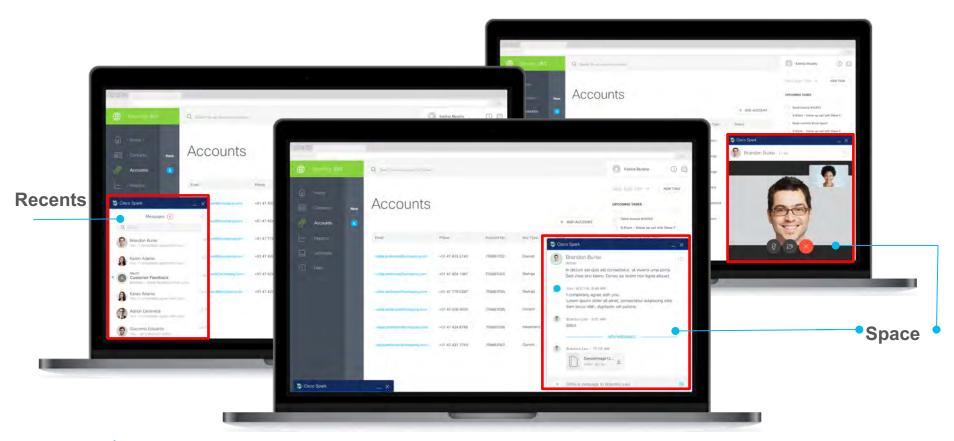
Access Token Success!







Webex Widgets





```
<!DOCTYPE html>
<html>
<head>
<meta charset="utf8">
<title>Space Widget Demo</title>
<script src="https://code.s4d.io/widget-space/production/bundle.js"></script>
k rel="stylesheet" href="https://code.s4d.io/widget-space/production/main.css">
</head>
<body>
<div id="my-webexteams-widget" style="width: 500px; height: 500px;"/>
<script>
var widgetEl = document.getElementById('my-webexteams-widget');
// Init a new widget
webex.widget(widgetEl).spaceWidget({
accessToken: 'ACCESS TOKEN',
destinationId: 'SPACE ID',
destinationType: 'spaceId'
</script>
</body>
```

https://developer.webex.com/docs/widgets



</html>

```
<!DOCTYPE html>
<html>
<head>
<meta charset="utf8">
\title>>>pace whaget Defino
<script src="https://code.s4d.io/widget-space/production/bundle.js"></script>
      al-"etylochoot" brof-"bttps://oodo.c/d.jo/widget.cooco/productio
</head>
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</html>
```



```
<!DOCTYPE html>
<html>
<head>
<meta charset="utf8">
<title>Space Widget Demo</title>
<script src="https://code.s4d.io/widget-space/production/bundle.is"></script>
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<podv>
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https://developer.webex.com/docs/widgets



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</head>
<body>
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<script>
var widgetel – document.getelement.byid/ my-webexteams-widget ),
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</body>
</html>
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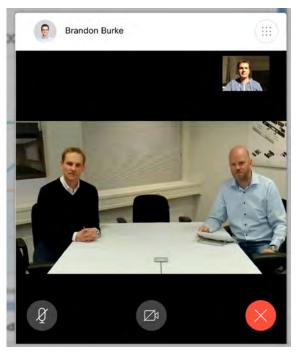
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</html>
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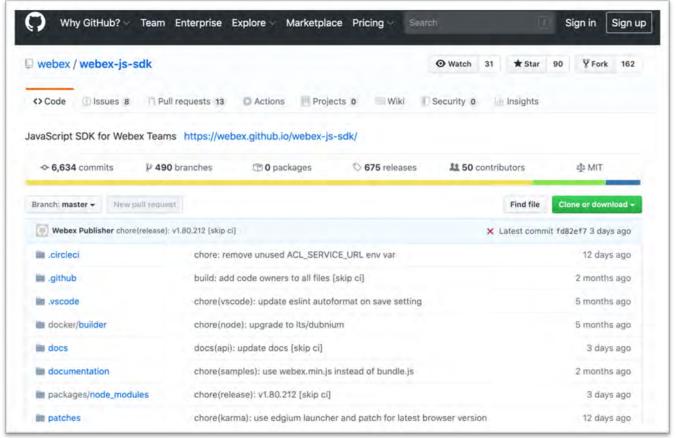
Webex Widget Success!



Sample code available at:







Source code available:

https://github.com/webex/webex-js-sdk



Javascript SDK Bundle on CDN

<script crossorigin src="https://unpkg.com/webex@^1/umd/webex.min.js">



Using the Javascript SDK for a Webex Meeting

- Initialize the SDK with Access Token
- Register the web browser as an SDK client
- Create Meeting
- Join Meeting
- Add Local Media
- Display Meeting Media on the Page



Initialize the SDK with Access Token

```
const webex = Webex.init({
  credentials: {
   access_token: myAccessToken
  }
});
```

Sample code available:



Register the web browser as an SDK client

```
webex.meetings.register()
.catch((err) => {
  console.error(err);
  alert(err);
  throw err;
});
```

Sample code available:



Create Meeting

const meeting = await webex.meetings.create(destination);

Sample code available:



Join Meeting

await meeting.join();

Sample code available:



```
const mediaSettings = {
receiveVideo: true,
receiveAudio: true,
receiveShare: false,
sendVideo: true,
sendAudio: true,
sendShare false
return meeting.getMediaStreams(mediaSettings).then((mediaStreams) => {
const [localStream, localShare] = mediaStreams;
meeting.addMedia({
 localShare.
 localStream,
 mediaSettings
```

Sample code available:



```
const mediaSettings = {
  receiveVideo: true,
  receiveAudio: true,
  receiveShare: false,
  sendVideo: true,
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  mediaSettings
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Campala and a cyciloblar
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Sample code available:



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}):
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Sample code available:



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  const [localStream, localShare] = mediaStreams;
}
```

```
meeting.addMedia({
  localShare,
  localStream,
  mediaSettings
});
}):
```

Sample code available:



```
// Handle media streams changes to ready state
meeting.on('media:ready', (media) => {
if (media.type === 'local') {
 document.getElementById('self-view').srcObject = media.stream;
if (media.type === 'remoteVideo') {
 document.getElementById('remote-view-video').srcObject = media.stream;
if (media.type === 'remoteAudio') {
 document.getElementById('remote-view-audio').srcObject = media.stream;
```

Sample code available:



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Sample code available:



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```

Sample code available:

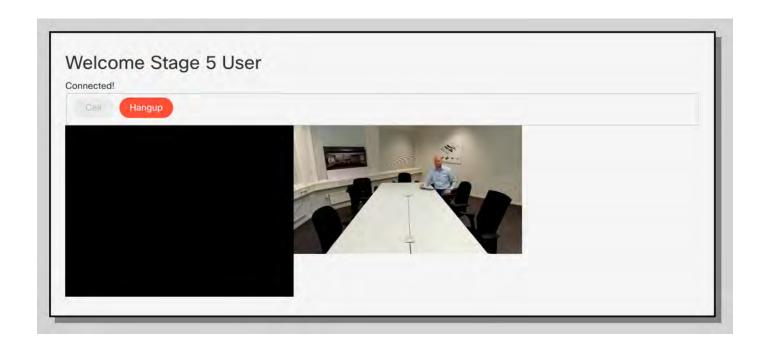


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if (media.type === 'local') {
 document.getElementById('self-view').srcObject = media.stream;
if (media.type === 'remoteVideo') {
 document.getElementById('remote-view-video').srcObject = media.stream;
  (media.type === 'remoteAudio') {
 document.getElementById('remote-view-audio').srcObject = media.stream;
```

Sample code available:



Successfully Connected to Meeting!



Sample code available:

https://github.com/WebexSamples/webex-meetings-quick-start





Creating a Meeting with the Webex iOS SDK

- Import SDK Via Cocoapods
- Authentication
- Register Device
- Make a Call



Import SDK Via Cocoapods

import WebexSDK

Sample code available:



Authentication

```
class LoginViewController: UIViewController {
 @IBAction func loginWithWebex(sender: AnyObject) {
    let clientId = "..."
    let clientSecret = "..."
    let scope = "spark:all"
    let redirectUri = "Webexdemoapp://response"
    let authenticator = OAuthAuthenticator(clientId: clientId, clientSec
    let webex = Webex(authenticator: authenticator)
    if !authenticator.authorized {
      authenticator.authorize(parentViewController: self) { success in
        if !success {
          print("User not authorized")
```

Sample code available:



Register Device

```
webex.phone.register() { error in
   if let error = error {
        ... // Device was not registered, and no calls can be sent
   } else {
        ... // Successfully registered device
   }
}
```

Sample code available:



Make a Call

```
// Make a call
webex.phone.dial("coworker@example.com", option: MediaOption.audioVideo
 switch ret {
 case .success(let call):
    call.onConnected = {
    call.onDisconnected = { reason in
 case .failure(let error):
    // failure
```

Sample code available:



Webex iOS Meeting Success!







Creating a Meeting with the Webex Android SDK

- Integrate the Webex Teams Android SDK
- Add the Webex Teams Android SDK Library
- Authentication
- Register Device
- Make a Call



Integrate the Webex Teams Android SDK

```
allprojects {
    repositories {
        jcenter()
        maven {
            url 'https://devhub.cisco.com/artifactory/webexsdk/'
```

Sample code available:



Add the Webex Teams Android SDK Library

```
dependencies {
    compile('com.ciscowebex:androidsdk:2.0.0@aar', {
        transitive = true
    })
}
```

Sample code available:



Authentication

```
String clientId = "YOUR_CLIENT_ID";
String clientSecret = "YOUR_CLIENT_SECRET";
String scope = "spark:all";
String redirectUri = "Webexdemoapp://response";
OAuthWebViewAuthenticator authenticator = new OAuthWebViewAuthenticator
Webex webex = new Webex(activity.getApplication(), authenticator)
if (!authenticator.isAuthorized()) {
    authenticator.authorize(webView, new CompletionHandler<Void>() {
        @Override
        public void onComplete(Result<Void> result) {
            if (!result.isSuccessful()) {
                System.out.println("User not authorized");
    3);
```

Sample code available:



Register Device

```
webex.phone().register(new CompletionHandler<Void>() {
    @Override
    public void onComplete(Result<Void> result) {
        if (result.isSuccessful()) {
            // Device registered
        else {
            // Device not registered, and calls will not be sent or receive
});
```

Sample code available:



Make a Call

```
webex.phone().dial("person@example.com", MediaOption.audioVideo(local,
    @Override
    public void onComplete(Result<Call> result) {
        Call call = result.getData();
        if (call != null) {
            call.setObserver(new CallObserver() {
                @Override
                public void onRinging(Call call) {
```

Sample code available:



Webex Android SDK Meeting Success!



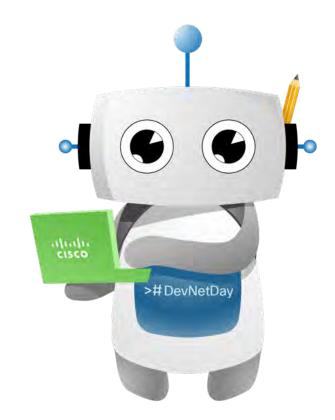


Wrapping Things Up!

- Create an Integration for Webex Authentication
- Webex Widgets for quick browser based meetings
- 3. Webex Javascript SDK for custom browser experiences
- 4. Webex iOS SDK for iOS mobile meetings
- Webex Android SDK for Android mobile meetings

Explore More

- Webex for Developers
 - https://developer.webex.com/
- Webex Widgets
 - https://developer.webex.com/docs/widgets
- Javascript SDK
 - https://developer.webex.com/docs/sdks/browser
- iOS SDK
 - https://developer.webex.com/docs/sdks/ios
- Android SDK
 - https://developer.webex.com/docs/sdks/android











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