

# Webex Calling APIs

Platform Overview

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Join at [slido.com](https://slido.com)

#244 004

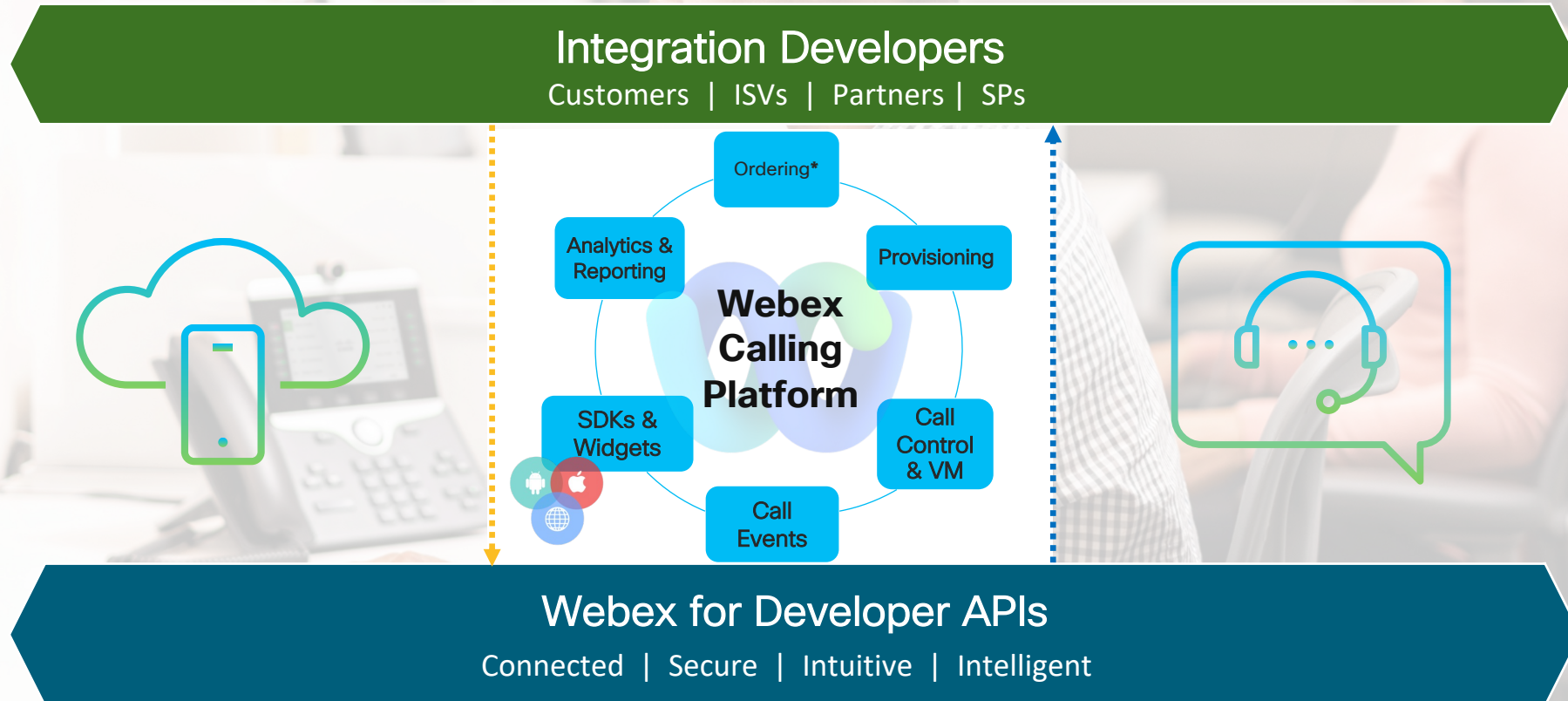


# Agenda



- **Webex Calling Platform Overview**
- **Administrator level APIs**
  - Provisioning
  - Reports and Analytics
- **User level APIs**
  - Call Controls
  - Call Events
  - Voice Messages
- **Enabling Sandbox Call Features**
- **Developer Resources**

# Webex Calling APIs Overview



\* Ordering is done via B2B APIs and not via Webex for Developers



# Webex Calling Administrator APIs – Provisioning



## Configure Webex Calling

- ✓ Groups
- ✓ Devices
- ✓ Locations
- ✓ Telephony

*...and more!*



# Modernized Webex Calling APIs – Provisioning



1 year ago...

Users (Phase 1)  
Devices\*  
Workspaces\*  
Locations\*

\* Read-Only APIs

*Today*

Users (Complete)  
Devices\*  
Locations\*\*  
Call Queues  
Hunt Groups  
Call Pickup  
Call Park  
Schedules  
Call Park  
Location  
Schedules  
Paging Group  
Auto Attendant  
Workspaces\*\*  
Extensions  
Numbers\*

\* Read-Only APIs

\*\* Read / Update Only



# Webex Calling Administrator APIs – Reports

/v1/reports

- APIs to generate Calling reports using the templates configured in Control Hub
- Available Webex Calling reports include:
  - Call quality
  - Engagement
  - Call History Details
  - Onboarding information





# New: Detailed Call History API

[analytics.webexapis.com/v1/cdr\\_feed](https://analytics.webexapis.com/v1/cdr_feed)

- Provides data for calls completed between *48 hours to 5 minutes ago*
- API rate limited to one call every 5 minutes
- Requires administrator scope with specific API access enabled

```
200 / OK
{
  "items": [
    {
      "Answer time": "2020-05-14T11:01:17.551Z",
      "Answered": "true",
      "Authorization code": "107",
      "Call ID": "SSE11011632114052012188291006",
      "Call type": "SIP_ENTERPRISE",
      "Called line ID": "CALLEDCLIDGOESHERE",
      "Called number": "2002",
      "Calling line ID": "YOURCLIDGOESHERE",
      "Calling number": "2001",
      "Client type": "SIP_TOLLFREE",
      "Client version": "1.0.2.3",
      "Correlation ID": "8e8e1dc7-4f25-4595-b9c",
      "Department ID": "4370c763-81ec-403b-aba:",
      "Device MAC": "6C710D8ABC10",
      "Dialed digits": "1246",
      "Direction": "ORIGINATING",
      "Duration": 36,
      "Inbound trunk": "InTrunk",
      "International country": "US",
      "Location": "Richardson",
      "Model": "8851-3PCC"
```



# Call Control API Overview

- APIs to perform **call control actions** for Webex Calling enabled users
- Available on Webex Developer Portal (<https://developers.webex.com>)
- Enables 3<sup>rd</sup> party apps to add powerful call control features:
  - Click to call, directory click to dial, digital receptionist apps, CRM tools
  - Supports dialing using PSTN, SIP URI, extension, and user id/email
  - Allows diverting calls to other users or voicemail
  - Supports video calls when appropriate
  - Supports and controls call recording

# Webex Calling **User Level** APIs – Call Control

## Call Actions

## Active Call Info & Call History

**POST** Dial

**POST** Answer

**POST** Reject

**POST** Hangup

**POST** Hold

**POST** Resume

**POST** Divert

**POST** Transfer

**POST** Park

**POST** Retrieve

**POST** Start Recording

**POST** Stop Recording

**POST** Pause Recording

**POST** Resume Recording

**POST** Transmit DTMF

**POST** Push

**POST** Pickup

**POST** Barge In

**GET** List Calls

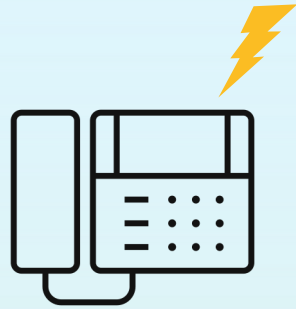
**GET** Get Call Details

**GET** List Call History

```
200 / OK
{
  "id": "Y21zY29zcGFyazovL3VzL0NBTEwvQkNMRC9jYV",
  "callSessionId": "MmFmNThiZjktYWE3Ny00NWESLTh",
  "personality": "originator",
  "state": "connecting",
  "remoteParty": {
    "name": "John Smith",
    "number": "+12223334444",
    "personId": "Y21zY29zcGFyazovL3VzL1BFT1BMRS",
    "placeId": "Y21zY29zcGFyazovL3VzL1BMQUNFL2I",
    "privacyEnabled": false,
    "callType": "location"
  },
  "appearance": 1,
  "created": "2016-04-21T17:00:00.000Z",
  "answered": "2016-04-21T17:00:00.000Z",
  "redirections": [
    {
      "reason": "busy",
      "redirectingParty": {
        "name": "John Smith",
        "number": "+12223334444",
        "personId": "Y21zY29zcGFyazovL3VzL1BFT1BMRS",
        "placeId": "Y21zY29zcGFyazovL3VzL1BMQUNFL2I",
        "privacyEnabled": false,
        "callType": "location"
      }
    }
  ],
  "recall": {
    "type": "park",
    "party": {
      "name": "John Smith",
      "number": "+12223334444",
      "personId": "Y21zY29zcGFyazovL3VzL1BFT1BMRS",
      "placeId": "Y21zY29zcGFyazovL3VzL1BMQUNFL2I",
      "privacyEnabled": false,
      "callType": "location"
    }
  },
  "recordingState": "pending"
}
```



# Webex Calling Webhooks– Call Control Events



## Call status events with webhooks

originating	originated	received
answered	held	resumed
disconnected	recordingStarting	recordingStarted
recordingPaused	recordingResumed	recordingStopped
transferred	bargedIn	retrieved
pickedUp	forwarded	updated

```
{
  "id": "Y21zY29zcGFyazovL3VzL1",
  "name": "Ni0xMwVILTKYTYEM5YTUZ...",
  "targetUrl": "https://example.com/calls/",
  "resource": "telephony_calls",
  "event": "deleted",
  "orgId": "0WM5LTRINWQtYjZi0C05NDZ3MGI...",
  "createdBy": "Yz0C1j0DQwLTmU...",
  "appId": "Y21zY29zcGFyazovLY...",
  "ownedBy": "creator",
  "status": "active",
  "created": "2022-09-14T18:03:25.829Z",
  "actorId": "Y21zY29zcGFyazovL3VzL1...",
  "data": {
    "eventType": "disconnected",
    "actorPersonId": "RS84MWNhZjUz0C1j...",
    "orgId": "0WM5LTRINWQtYjZi0C05NDZ3MGI...",
    "eventTimestamp": "2020-10-15T18:06:20.7817",
    "callId": "Y21zY29zcGFyazovL3Vz...",
    "callSessionId": "0GQ3YzhkNzgtZjIxZib...",
    "personality": "terminator",
    "state": "disconnected",
    "remoteParty": {
      "name": "ado usr8",
      "number": "1012",
      "personId": "Y21zY29zcGFyazovL3V...",
      "privacyEnabled": false,
      "callType": "location"
    },
    "created": "2022-09-15T18:06:10.2692",
    "answered": "2022-09-15T18:06:17.2117",
    "disconnected": "2022-9-15T18:06:20.781Z"
  }
}
```



# Voice Message APIs

- Voicemail APIs

**GET** Get Message Summary

**GET** List Messages

**DELETE** Delete Message

**POST** Mark As Read

**POST** Mark As Unread

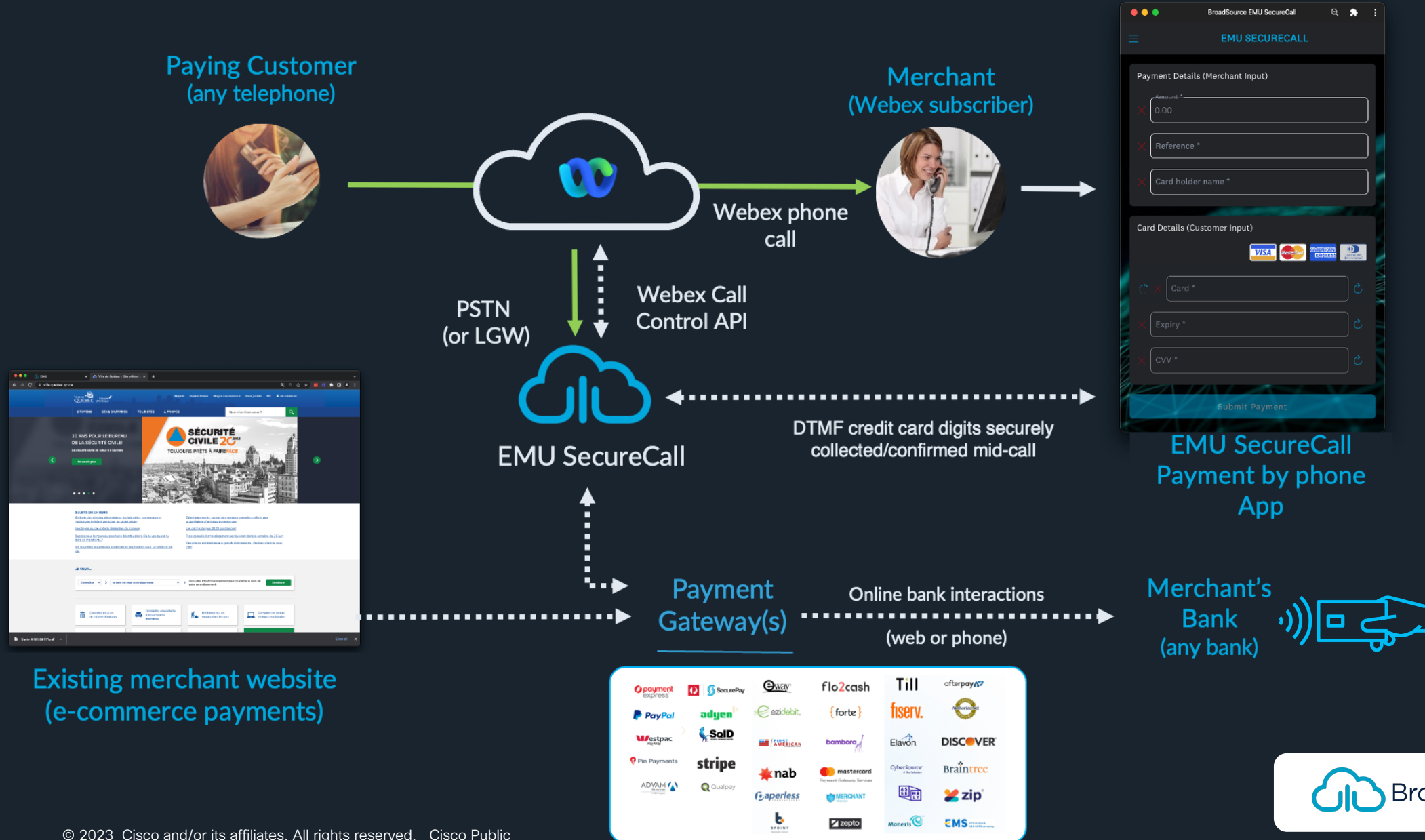
- Voicemail webhook events

- Message received
- Message deleted
- Message marked as (un)read



200 / OK

```
{  
  "newMessages": 2,  
  "oldMessages": 5,  
  "newUrgentMessages": 0,  
  "oldUrgentMessages": 1  
}
```



# Webex developer sandbox

Provides administrator (*Control Hub*) access to a licensed Webex org

**Free** to all developers!

Create/test:

- Integrations that require Admin and Compliance APIs or Control Hub access
- Endpoints that require special licensing
- Outside of your enterprise organization



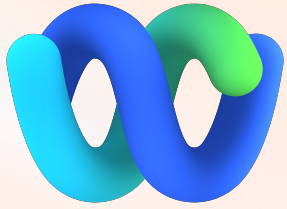


# Enabling Calling Features in Control Hub

- *Barge-in* and *Recording* must be enabled by an org admin
- This can be done manually in the Control Hub, limited to one user configuration at a time
- Alternative bulk/batch method with provisioning APIs

The screenshot displays the Cisco Webex Control Hub interface. The left sidebar contains navigation menus for Overview, Monitoring (Analytics, Troubleshooting), Management (Users, Workspaces, Devices, Apps, Account, Organization settings), and Services (Messaging, Meeting, Calling, Connected UC, Hybrid). The main content area is titled 'Overview' and shows the status of various services: Webex Services (ALL ONLINE) including Messenger, Meetings, Developer API, Teams, Hybrid Services, Room Devices, Calling, Control Hub, and Contact Center. Below this, Hybrid Services (7 INCOMPLETE) includes Calendar (Google), Calendar (Office 365), Calendar (Exchange), Call, Message, Video Mesh, and Serviceability. A 'Devices' section indicates 'No Devices Added' with an 'Add Devices' button. On the right, an 'Onboarding' section shows 459 Total Users with a donut chart for Inactive, Not Verified, Verified, and Active users. Below this is a 'What's New' section with 'Cisco COVID-19 Webex Response Resources' and a 'Quick Links' section with various management and training links.

# Demo



# Webex Calling Apps: Developer Resources

- Developer start guide:  
[developer.webex.com/docs/api/guides/webex-calling](https://developer.webex.com/docs/api/guides/webex-calling)
- API Postman Collection:  
[github.com/webex/postman-webex-calling](https://github.com/webex/postman-webex-calling)
- Webex Calling Python SDK  
[github.com/jeokrohn/wxc\\_sdk](https://github.com/jeokrohn/wxc_sdk)
- Request Mobile Calling SDK beta access:  
Email: [kritjain@cisco.com](mailto:kritjain@cisco.com)
- Webex Developer Vidcast Collection:  
[cs.co/WebexDevsVidcast](https://cs.co/WebexDevsVidcast)




# More Resources



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## Webex Developer

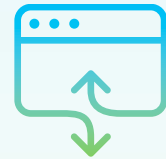
[developer.webex.com](https://developer.webex.com)

@WebexDevs 

[cs.co/WebexDeveloperCommunity](https://cs.co/WebexDeveloperCommunity)

[cs.co/WebexDevInfo](https://cs.co/WebexDevInfo)

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## Github

[github.com/webex](https://github.com/webex)

[github.com/webexsamples](https://github.com/webexsamples)

[github.com/webexcommunity](https://github.com/webexcommunity)

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## Webex App Hub

[apphub.webex.com](https://apphub.webex.com)