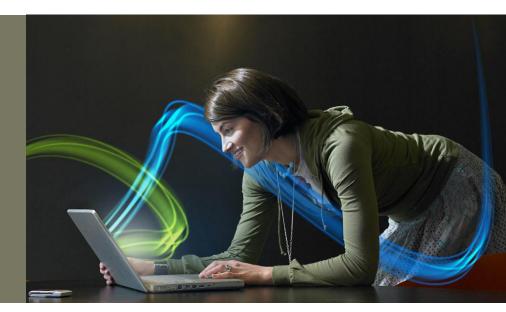


WebEx Meeting Service Integration Platform



Phillip Liu Sr. Product Manager November 2011

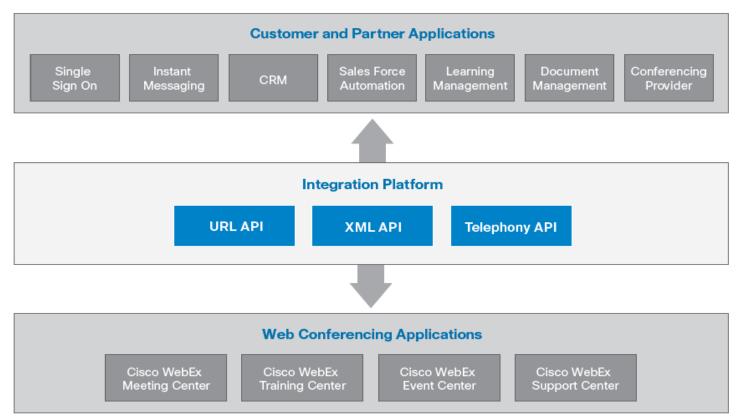
> ..|...|.. cisco

Agenda

- Integration Platform Overview
- XML API
- URL API
- TSP API

WebEx Developer Platform

- URL API simple URL parameter interface
- XML API comprehensive web services interface
- Telephony Service Provider (TSP) API in meeting teleconferencing interface.



Cisco Collaboration Cloud

API Developer Community

XML & URL API

- 750+ companies
- 1500+ individual developers

TSP API

- Intercall
- AT&T
- Verizon
- Premier
- NTT

WebEx ISV Developers



WebEx Telephony Reseller Developers



XML API Technical Deep-Dive

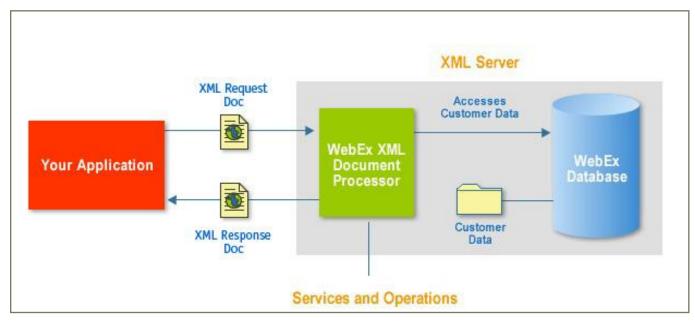


- What is the XML API?
- Basic Command Structure
- Service Break-Down
- User Provisioning
- Billing / Usage Collection

What is the XML API?

The WebEx XML API is a comprehensive XSD compliant web service that allows interacting with WebEx's Pre and Post Meeting Data.

- Posted Over HTTPS
 - URI: <u>https://[sitename].webex.com/WBXService/XMLService</u>



Developer Resources

Documentation and Schema available at http://developers.webex.com

Basic XML Command Structure

Security Context

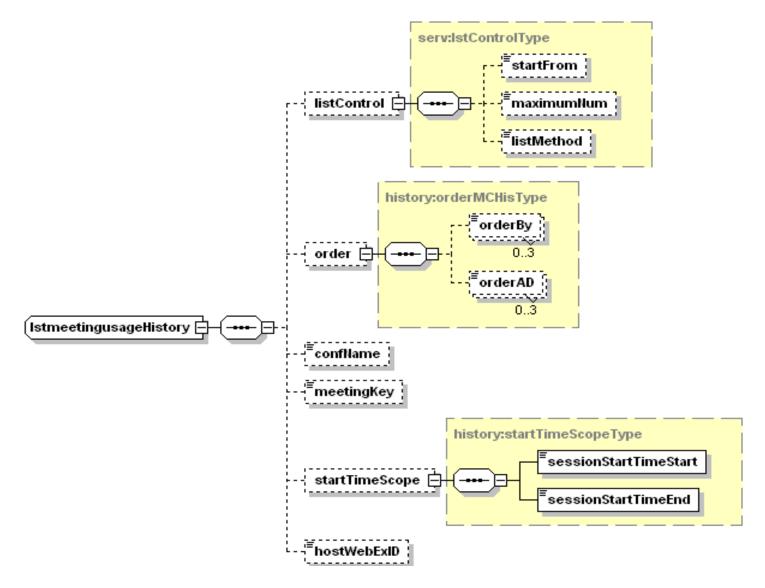
-Host Account Credentials

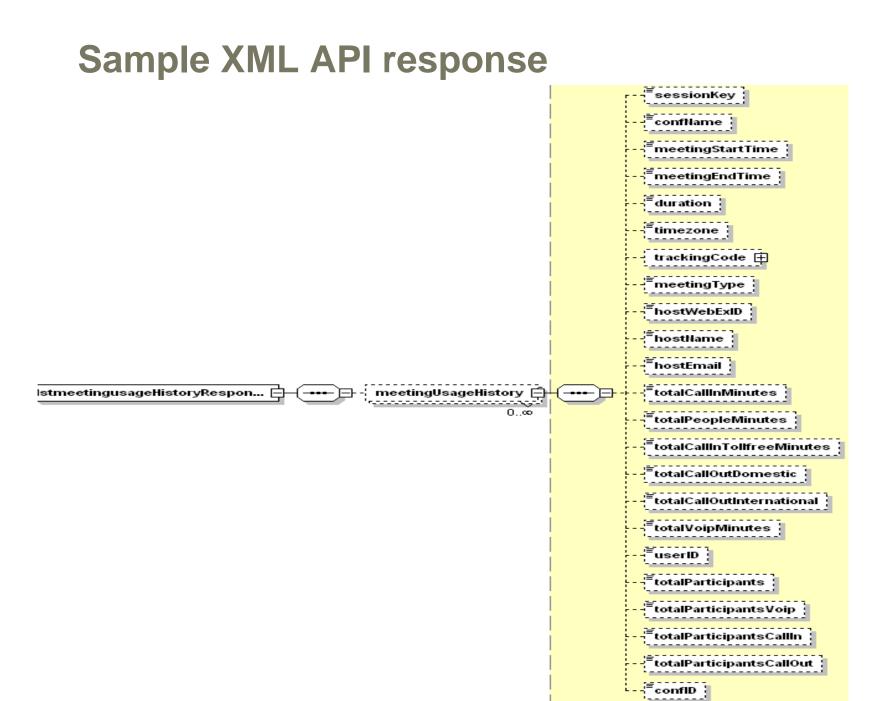
- WebEx username and password or session ticket
- Permissions required depend on the command
- Site Specification
 - SiteID: WebEx Site unique identifier
 - SiteName: Site domain name
 - PartnerID: Site-level password for using the APIs

Body Content

- Specifies the XML API request name
- Child nodes provide command-specific data

Sample XML API request body content





XML API Service Break-Down

XML API functionality is grouped into separate XML API Services

WebEx Center Services

- Meeting Center, Event Center, Training Center, Support Center session management
- User Service:
 - User account management
- History Service:
 - Retrieves usage data
- Site Service:
 - Retrieves Site Configurations
- General Session Service:
 - Commands that pertain to all WebEx Centers

XML API Function Summary

Service	Important Requests
User	Create/Set/Lst/Get/DelUser, LstSummaryUser, Getloginurl/GetlogouturlUser
Meeting	Create/Set/Lst/Get/DelMeeting, LstSummaryMeeting, Gethosturl/GetjoinurlMeeting
Training Session	Create/Set/Lst/Get/DelTrainingSession, GetLabInfo, CheckLabAvailability, GetLabSchedule, LstScheduledTests, GetTestInformation, GetIMStestResult
Event	Create/Set/Lst/Get/DelEvent
Support Session	CreateSupportSession
Meeting Attendee	Create/Lst/DelMeetingAttendee
History	LsttrainingsessionHistory, LsttrainingattendeeHistory, LstmeetingusageHistory, LstmeetingattendeeHistory, LsteventsessionHistory, LsteventsessionHistory, LstsupportsessionHistory, LstsupportsessionHistory,
Site	GetSite
General	LstSummarySession, Lst/Set/DelRecording, LstContact, CreateContacts

Host Account Provisioning

- Commands: CreateUser, SetUser
- Basic Configurations
 - webExId, password: The WebEx Username & Password
 - firstName, lastName, email, phones
 - active: Sets whether the host is active or not
- Audio Account Settings
 - tspAccount: Allows setting up to three TSP audio accounts
- Other Important Settings
 - privilege: Various elements that control what features a user has
 - meetingTypes: Sets what session types the user may use to schedule WebEx sessions

Usage Reporting

Each WebEx Center provides a set of two commands that return usage data

Attendee History

- Detailed information on each attendee that joined the session
- Provides minute totals for how long each participant spent on the web conference
- Usage / Session History
 - Report that returns a summary of sessions within a given date-span
 - Provides usage totals for each session returned

Examples

- LstmeetingusageHistory: Will return a list of meetings that occurred during the time-span you specified
- LstmeetingattendeeHistory: Will return a list of attendees that attended the session of the *meetingKey* specified.

XML API Deployment Phases

New XML API versions are deployed in the following three phase process

Beta

After engineering has fully tested a new XML API version it is deployed to our beta servers for a week.

Preview

After Beta testing, the new version is deployed to all production servers at the following preview URL. Customers can test the new version against their production data in preview for a minimum of three weeks:

https://sitename.webex.com/WBXService/preview/XMLService

General Availability

If no major bugs have been found during the preview testing period, the new version will be promoted to general availability at the production URL: https://sitename.webex.com/WBXService/XMLService

Note: Version Flexibility

The vast majority of customers use the General Availability XML API version. However, customers can choose to continue using older XML API versions for stability or get updated to upcoming preview versions in advance for early access to new features.

URL API Technical Deep-Dive



- What is the URL API?
- Service Break-Down
- User Authentication

What is the URL API?

- A simple, URL based interface to execute WebEx meeting functionality in a browser.
- WebEx Recommends Using the URL API for:
 - Authentication to the WebEx Page
 - Immediately starting/joining WebEx sessions
- URLAPI Version Coincides with WBS Version

URL API Functionality

Partner (p.php)

- User account login
- User account log out
- User account creation
- User account editing

My WebEx (o.php)

- User Profile
- My WebEx features

Meeting (m.php)

- Schedule meetings
- Delete meetings
- Host meetings
- Join meetings
- List meetings
- Start meetings
- TC HOL functionality

URL API Service Break-Down

Partner Page (p.php)

- Login / Logout
- Add / Update Users

Meeting Page (m.php)

Provides Functionality around Meetings/Sessions/Events

My Office Page (o.php)

Update profile information

Computer page (c.php)

Access Anywhere Features

Hands-on Lab (h.php)

Access to lab info

File Mgmt Page (f.php)

Allows host to upload or download files

URL API Basics

• URI to Access the URL API

<u>http://[sitename].webex.com/[sitename]/[API_Page]</u>

Each Command is Defined by "AT"

- Login → p.php?AT=LI
- Logout → p.php?AT=LO
- Join Meeting → m.php?AT=JM

Back URL (BU)

- The URL to be forwarded to after the command executes
- Almost every command has a BU argument
- Ampersand characters must be URL encoded (you can encode the whole string if you desire)

Command Results are Returned

- ST SUCCESS or FAIL
- RS Failure Reason

URL API Format

- https://company.webex.com/company/<page>?AT=
 <actionCode>&<param1>=<value1>&<param2>=<valu
 e2> ...&BU=<URL>
 - page = PHP API page
 - actionCode = API function
 - URL = page to appear after command executes

Example: Joining a meeting

https://company.webex.com/company/m.php?AT=JM

&MK=12345678&AN=John Doe&AE=johndoe@company.com

User Authentication

- Login Command (AT=LI)
 - WID WebEx Username
 - PW Password
 - MU URL to be directed to if login is successful
 - BU URL to be directed to if login fails
 - This parameter only behaves this way for the Login Command
- Login Command Example:
 - https://[site].webex.com/[site]/p.php?AT=LI

&WID=joe &PW=pass &MU=http://success.org &BU=http://failure.org

URL API Resources

Documentation

- WID WebEx Username
- PW Password
- MU URL to be directed to if login is successful
- BU URL to be directed to if login fails
 - This parameter only behaves this way for the Login Command
- Login Command Example:
 - https://[site].webex.com/[site]/p.php?AT=LI

&WID=joe &PW=pass &MU=http://success.org &BU=http://failure.org

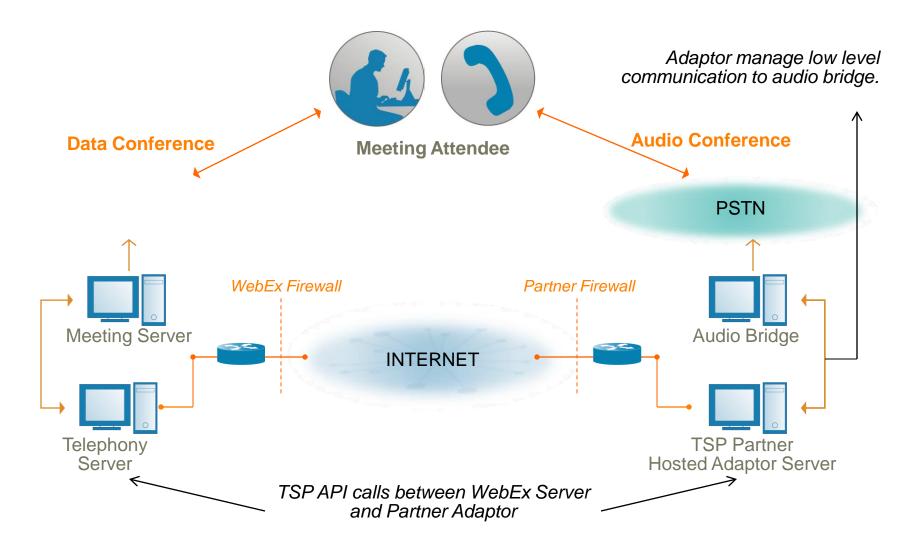
TSP API Technical Deep-Dive



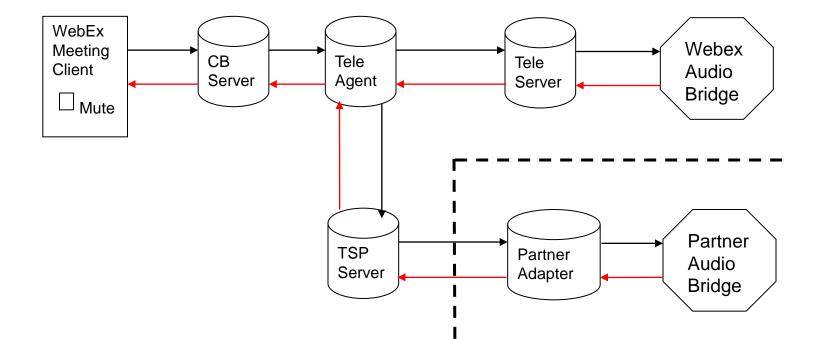
Telephony Service Provider (TSP) API

- Call In / Call Out
- Call out to attendee
- Mute
- Unmute
- Mute All
- Unmute All
- Expel
- Leave Teleconference

TSP & Adaptor Architecture



TSP Server Architecture



TSP Server to Bridge Adapter messages

Accounts

- CreateAccount
- AuthenticateAccount
- UpdateAccount
- DeleteAccount

Conference Mgmt

- CreateConference
- UpdateConference
- GetConfInfo
- Callout
- GetCallInfo
- ChangeCallPrivilege mute, unmute
- DropCall
- CloseConference

- Bridge Mgmt
- GetBridgeInfo
- GetBridgeStatus
- GetResource
- Reset
- RspMessageError

Adapter to TSP Server

- NotifyConferenceChange muted, normal
- NotifyUserChange mute, unmute, leave, etc
- NotifyUserEnter new call in user.
- RspMessageError

Cisco OeX