



Worldwide
Sales Training

Collaboration Tech Update

Collaboration System Release 12.0 (CSR 12.0)

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20.-22. juni 2017

Indhold af denne præsentation

Denne præsentation indeholder uddrag af hvad der blev præsenteret på Collaboration Tech Updates i Aarhus og Nordhavn hhv. 20. og 22. juni 2017.

Pga. af uannonceret indhold er det ikke muligt at publicere den fulde præsentation.

Hvis du er Cisco partner eller slutkunde og har underskrevet NDA (Non-Disclosure Agreement), kan du kontakte Per Toft, ptoft@cisco.com, for at få præsentationen tilsendt.

Agenda

CSR 12.0 Overview

Spark Hybrid Services

Desktop Endpoints update - 7800, 8800, DX Series

Jabber update

Pause

Room Systems update

CMS & Interop

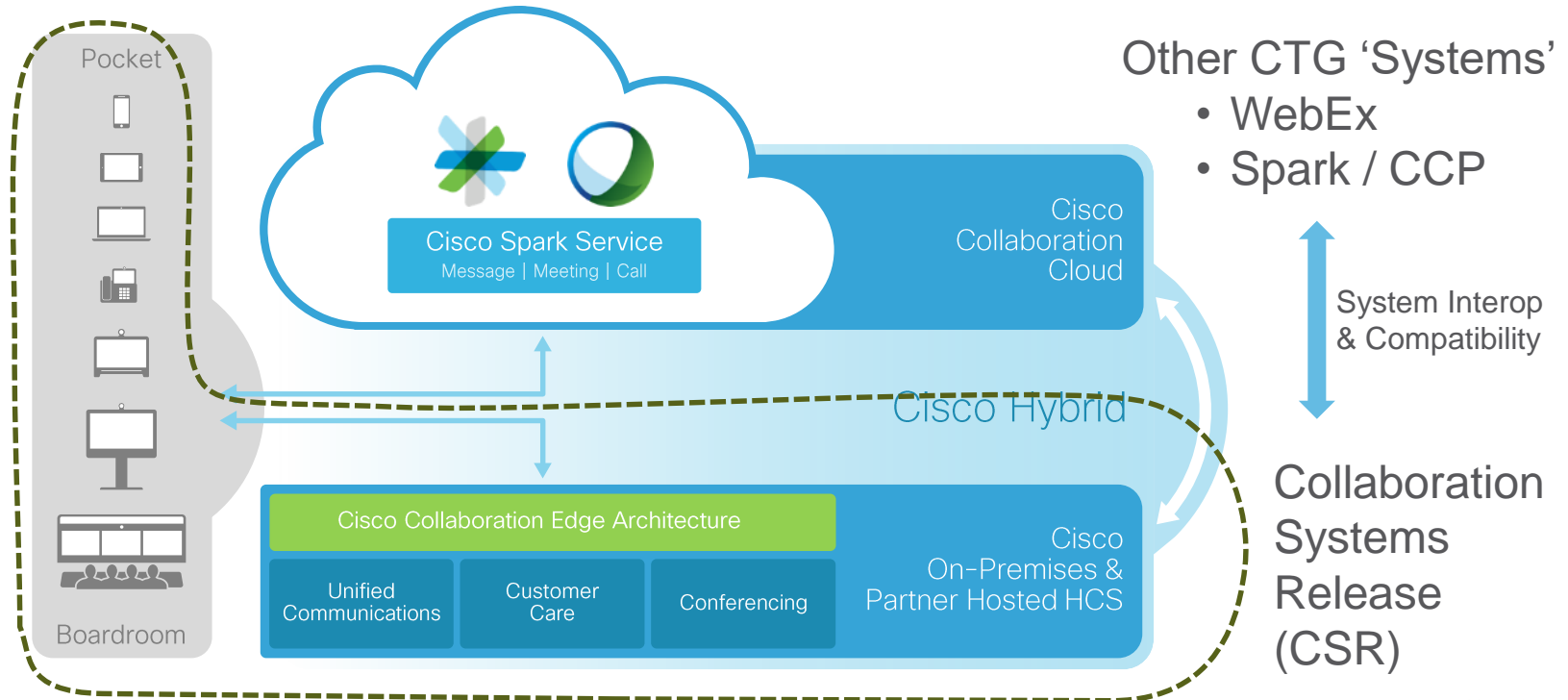
Contact Center Express

Licensing update

Chapter Censored...

CSR 12.0

Cisco Collaboration Architecture and the Collaboration Systems Release (CSR)



Note: The HCS system is derived from the CSR system

CSR 12 Summary

CSR 12.0

APNs

Apple Push Notification service - Jabber iOS voice and video calling

Hybrid Services

Expressway Efficiencies; Deskphone controls on Spark (UCM calls)

IPv6

IPv6 Phase 1 (Phones)

Mid-Market

BE4K Launch | CME Refresh | BE Management GA

Licensing Enhancements

More Smart Agents | Deprecate Prime License Manager for CUCM, CUC, CER

Security & Compliance

Transport Layer Security (TLS) to support PCI compliance

Conferencing Enhancements

CMS-CSR Integration | Dualscreen conferencing

-abilities

Reduced CUCM time to upgrade, Opus, UC Federation, Single Edge

Spark Hybrid Services

Cisco Spark Collaboration Services

Common Management



Message



Meeting



Call

Open Platform



Application Integration
APIs

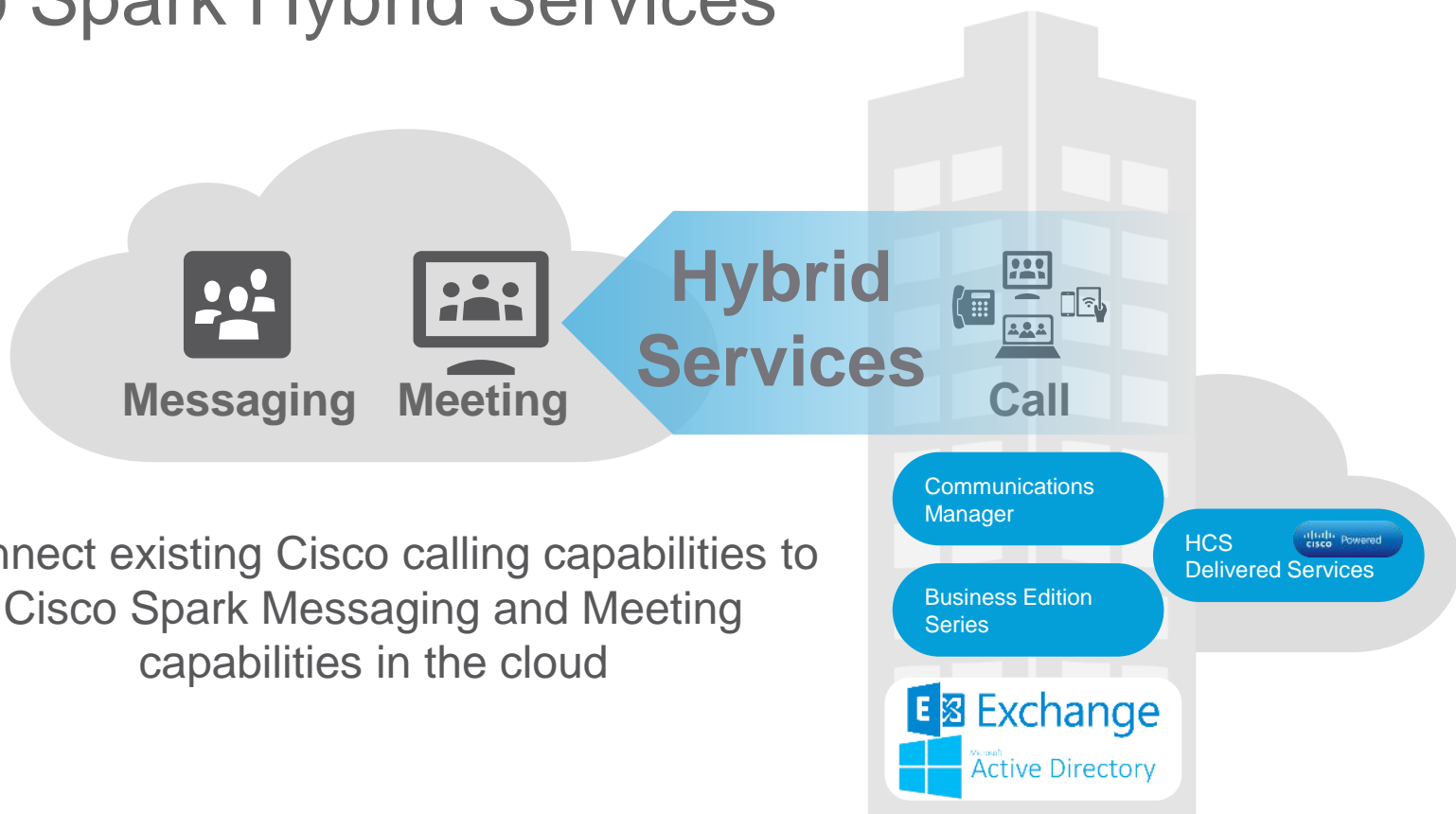


Partner Services
Interconnect



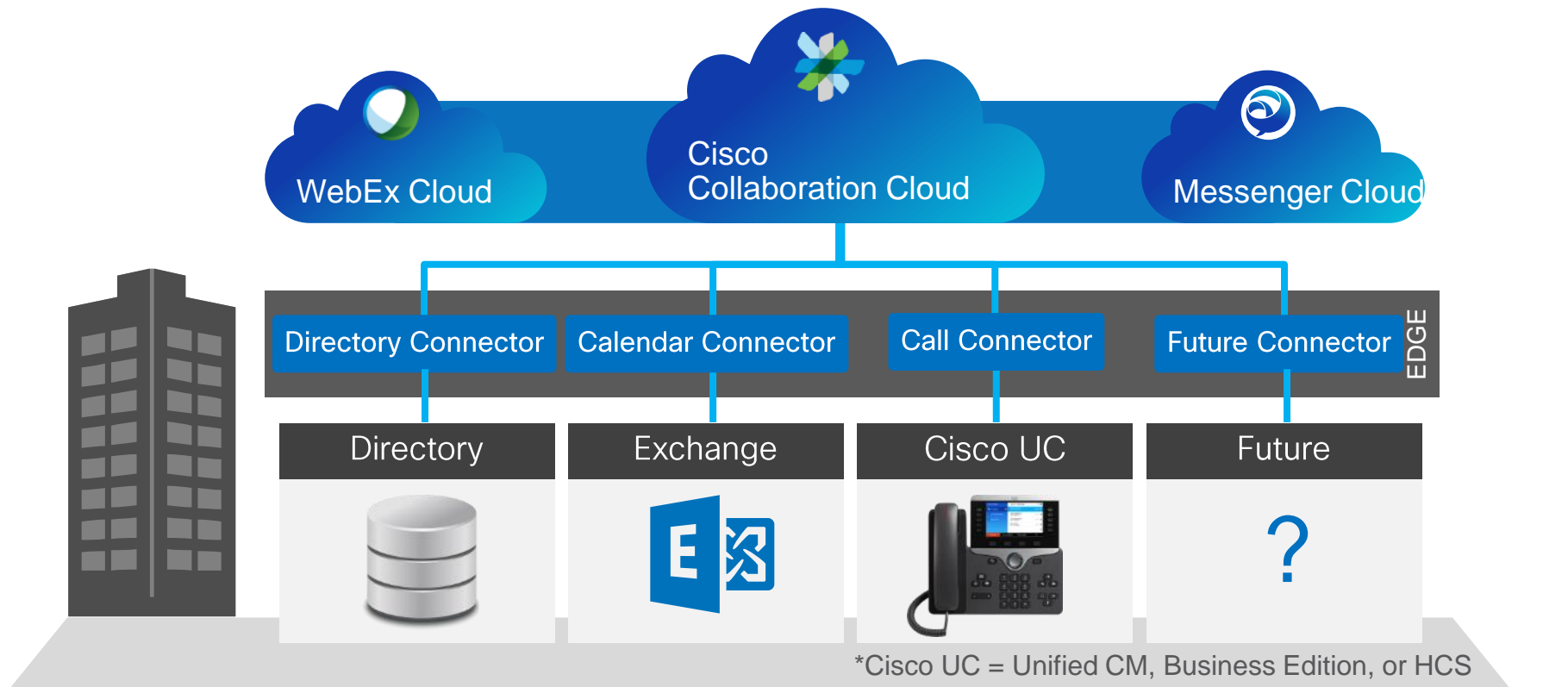
Spark Hybrid Services
Cloud + Prem

Cisco Spark Hybrid Services



Connect existing Cisco calling capabilities to Cisco Spark Messaging and Meeting capabilities in the cloud

Integrating Premise and Cloud



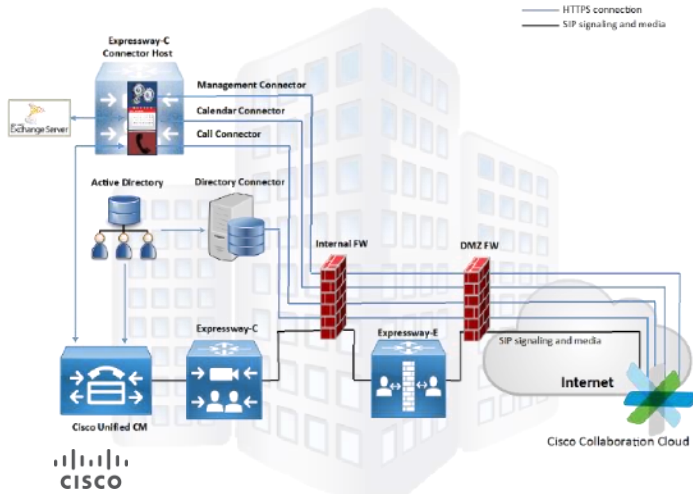
*Cisco UC = Unified CM, Business Edition, or HCS

CSR 12.0: Hybrid Services

CSR 12.0: Hybrid Services

- Extends the value of UC solutions
- Spark Hybrid Services bring existing UC assets and Spark capabilities together
- Provides enhanced collaboration capabilities and enhanced user experiences.

CSR 12.0 Enhancements:

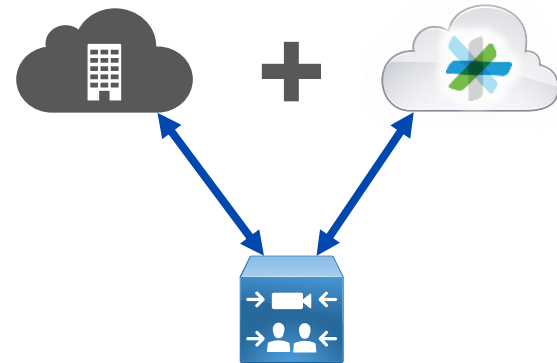


- Eliminate need for dedicated Expressway for Hybrid Services
- Spark RD
- Control of CUCM-registered endpoints, in Spark
- Hybrid Media Services for SIP calls into Cloud Meetings
- Jabber-Spark IM&P integration (WebEx Messenger backend)

CSR 12.0: Hybrid Services

Hybrid Connectors co-resident with regular Expressway

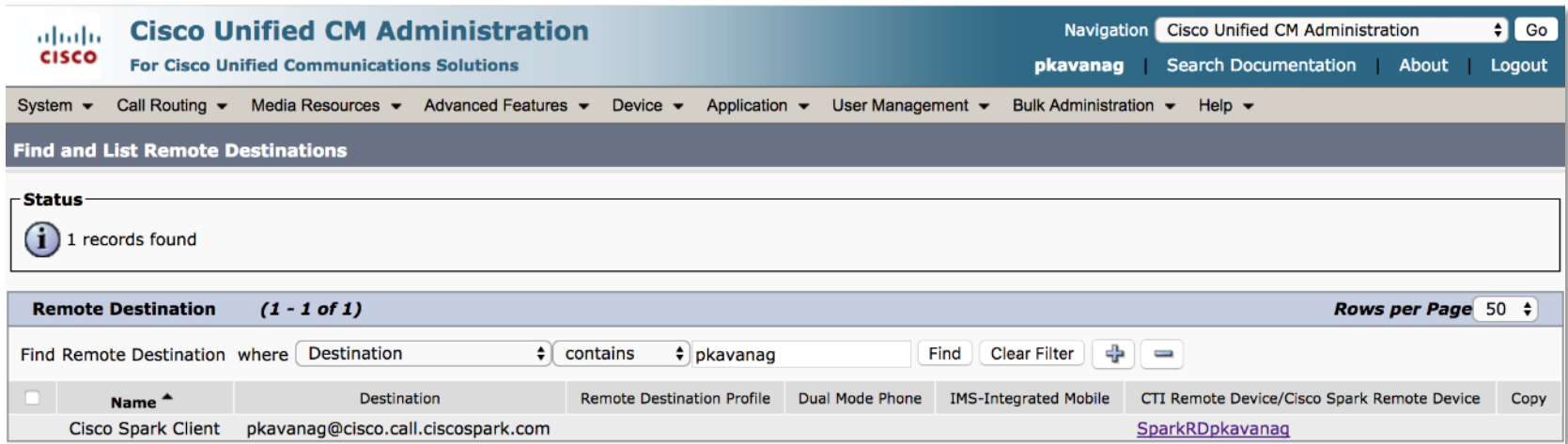
- Dedicated Expressway-C for Hybrid Connectors is no longer needed
Ideal for small/medium customers, and also HCS partners who manage many small customers.
- Co-residency for:
 - Traversal / B2B / MS interop calls
 - Calendar Connector
 - Call Connector (CSA/CSC)
- Scale:
 - Small OVA – 500 users
 - Medium OVA – 2,000 users



CSR 12.0: Hybrid Services

Spark RD

- “Spark RD” as new device type in UCM
- Does not count as a device for UC licensing purposes



The screenshot shows the Cisco Unified CM Administration web interface. The page title is "Find and List Remote Destinations". A search bar at the top indicates "1 records found". Below this, a table lists the search results. The table has columns for Name, Destination, Remote Destination Profile, Dual Mode Phone, IMS-Integrated Mobile, CTI Remote Device/Cisco Spark Remote Device, and Copy. One record is shown: "Cisco Spark Client" with destination "pkavanag@cisco.call.ciscospark.com" and a link to "SparkRDpkavanag".

Cisco Unified CM Administration
For Cisco Unified Communications Solutions

Navigation: Cisco Unified CM Administration Go

pkavanag | Search Documentation | About | Logout

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾ Help ▾

Find and List Remote Destinations

Status

i 1 records found

Remote Destination (1 - 1 of 1) **Rows per Page** 50 ▾

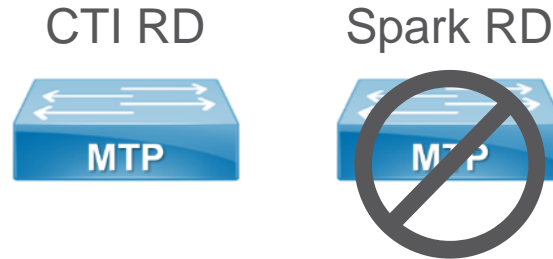
Find Remote Destination where Destination ▾ contains ▾ pkavanag Find Clear Filter + -

<input type="checkbox"/>	Name ^	Destination	Remote Destination Profile	Dual Mode Phone	IMS-Integrated Mobile	CTI Remote Device/Cisco Spark Remote Device	Copy
<input type="checkbox"/>	Cisco Spark Client	pkavanag@cisco.call.ciscospark.com				SparkRDpkavanag	

CSR 12.0: Hybrid Services

Spark RD

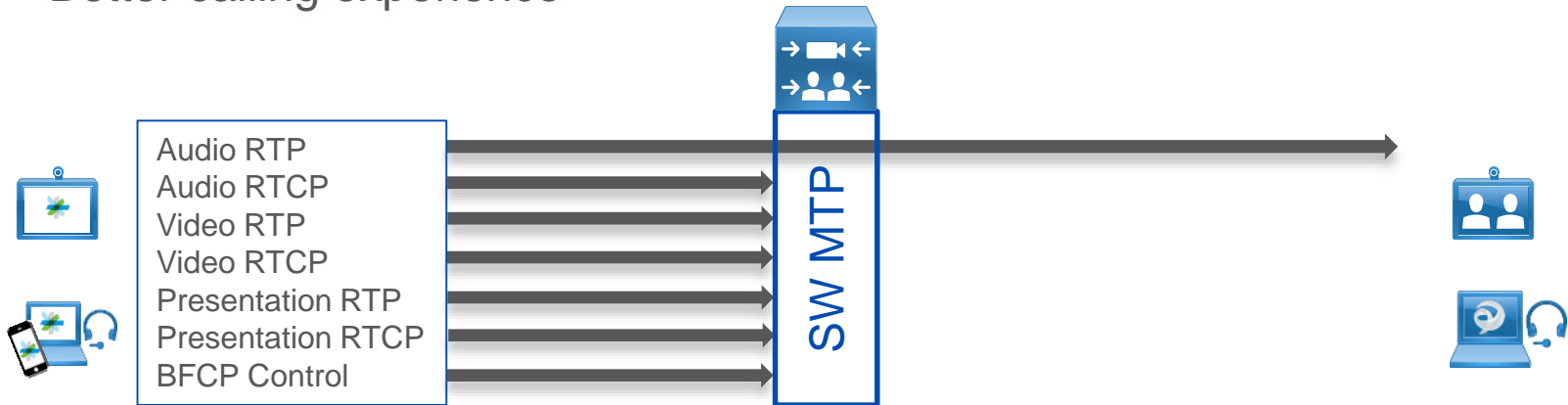
- “Spark RD” as new device type in UCM
- Does not count as a device for UC licensing purposes
- Replaces use of CTI RD
- Better calling experience



CSR 12.0: Hybrid Services

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CSR 12.0: Hybrid Services

Spark RD

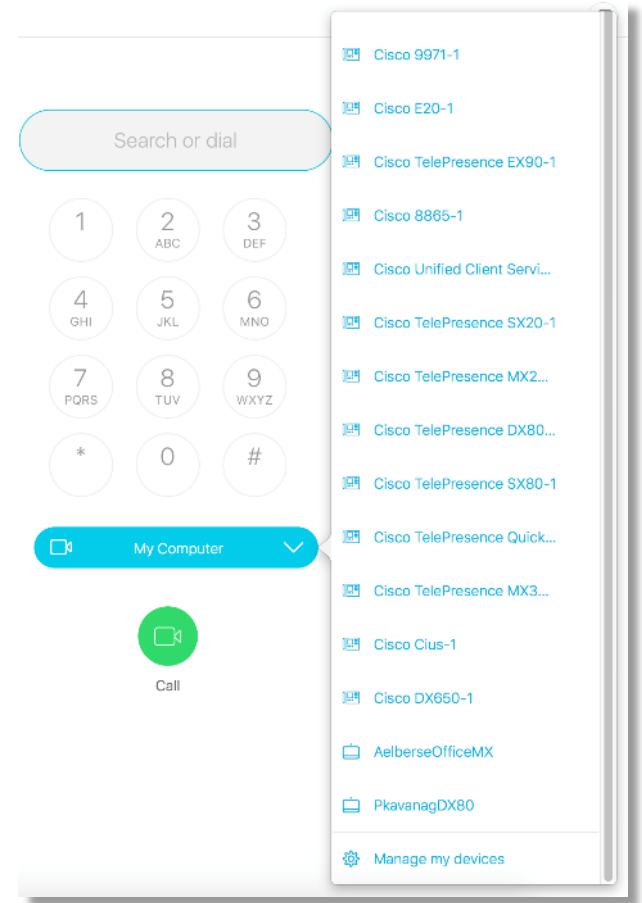
- “Spark RD” as new device type in UCM
- Does not count as a device for UC licensing purposes
- Replaces use of CTI RD
- Better calling experience
- Available in:
 - 10.5(2) SU5
 - 11.0(1a) SU3
 - 11.5(1) SU3
 - 12.0(1)

File Information ▲	Release Date	Size	
10.5(2)SU5 US Export Restricted - full encryption (non-bootable) - For upgrades from 10x only. Upgrades from 9.x or earlier versions must be requested via PUT (www.cisco.com/upgrade) or purchased to obtain the necessary licenses. UCSInstall_UCOS_10.5.2.15900-8.sgn.iso	11-APR-2017	5008.35 MB	<input type="button" value="Download"/> <input type="button" value="Add to cart"/> <input type="button" value="Publish"/>

CSR 12.0: Hybrid Services

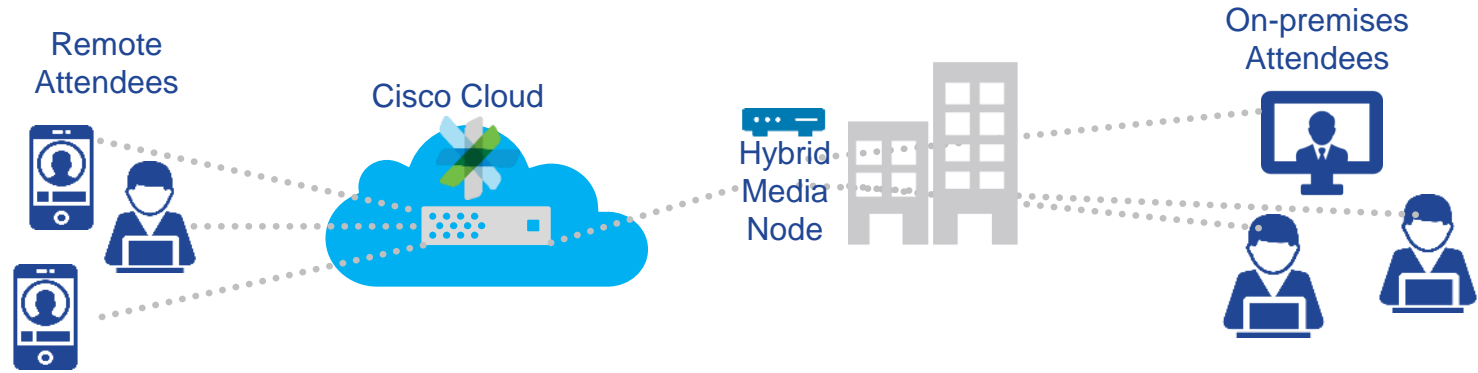
UCM endpoints in Spark

- Place outgoing calls or answer incoming calls using CUCM-registered endpoints under control of Spark client
- Select which device you want controlled



Cisco Spark Hybrid Media Node

A little of our cloud on your premises

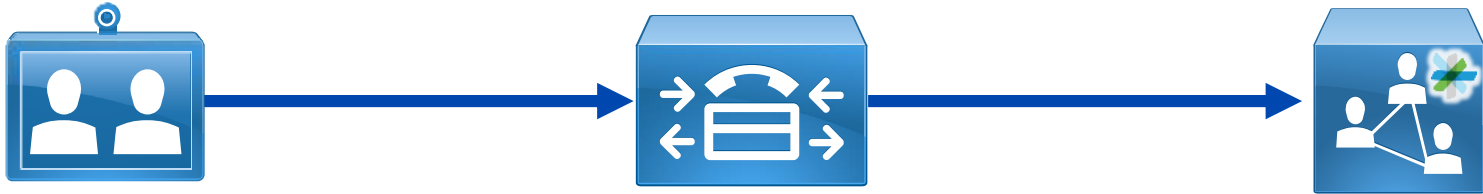


- Software providing local media processing for on-prem attendees
- All media no longer goes to cloud. Stays local for on-prem attendees
- Managed by and registers to Cisco cloud
- Automatic overflow to cloud if local capacity is full or datacenter unavailable

CSR 12.0: Hybrid Services

Hybrid Media Services for SIP calls into Cloud Meetings

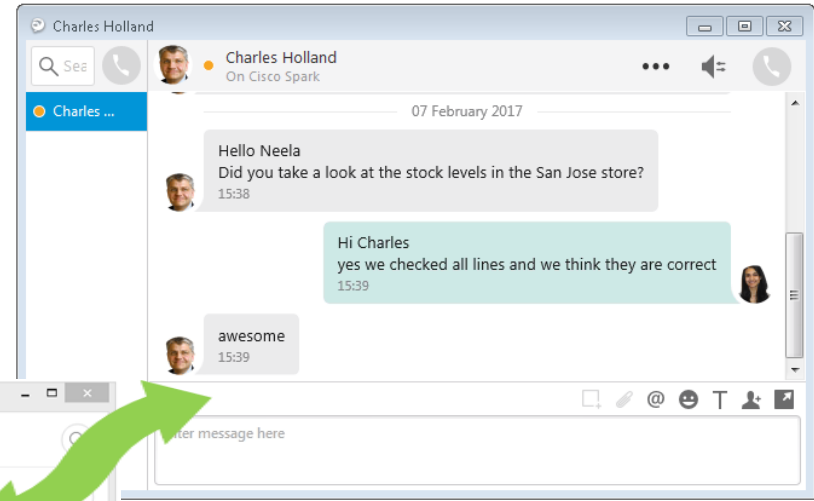
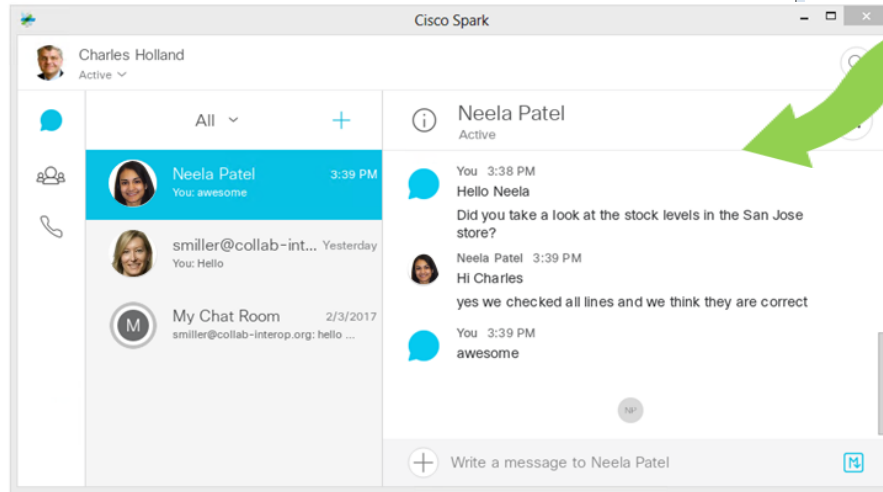
- a.k.a. HMS Phase 2
- SIP trunk from UCM to HMNs
- Calls: UCM Endpoint → Cloud Conf
 - Spark Meetings: *@meet.ciscospark.com
 - WebEx Meetings with Video (aka CMR Cloud): *@sitename.webex.com



CSR 12.0: Hybrid Services

Jabber-Spark IM&P Integration

- Cisco Spark and Jabber users can collaborate using Chat messages.

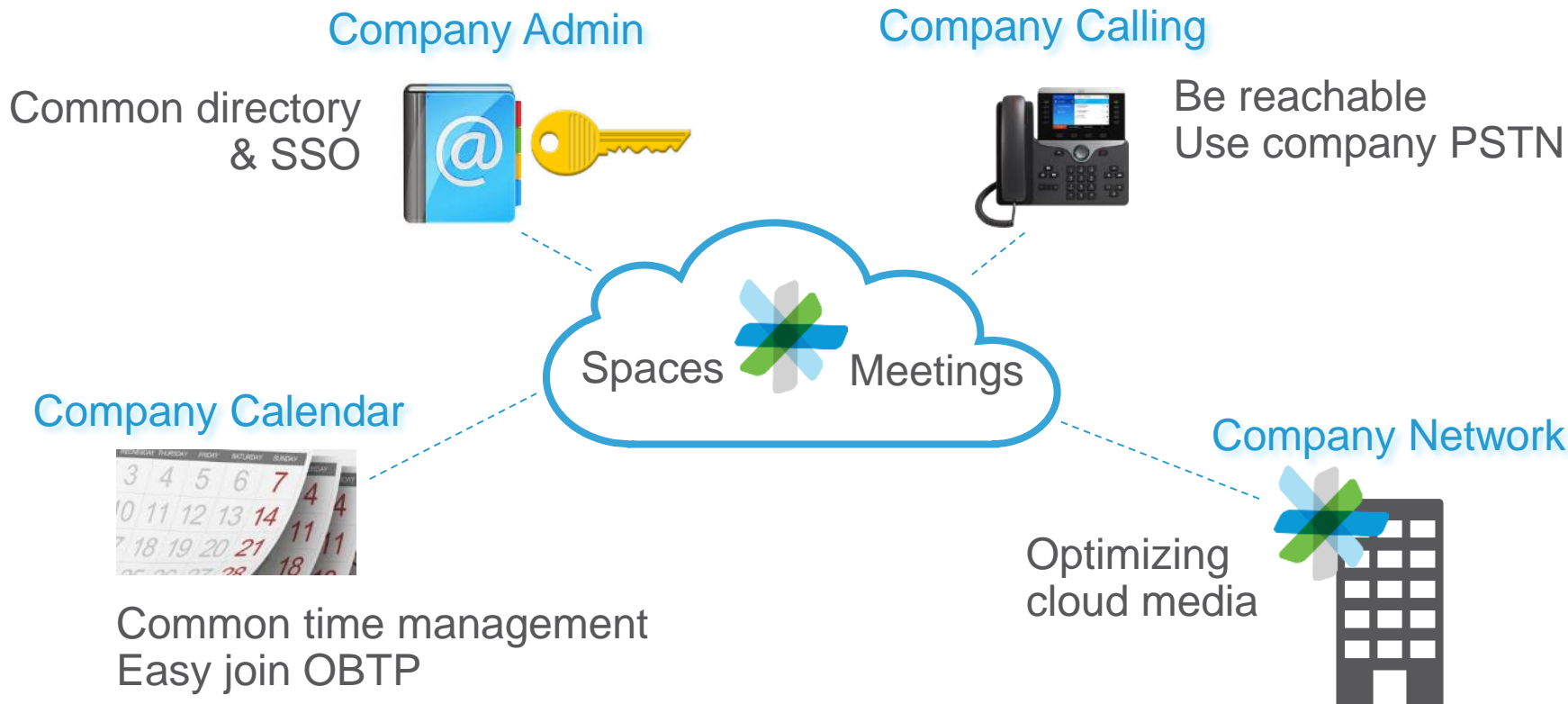


Only for Jabber clients registered to WebEx Messenger in Phase 1.

Chapter Censored...

Hybrid Services – What's Next...

Adding Value to Spark

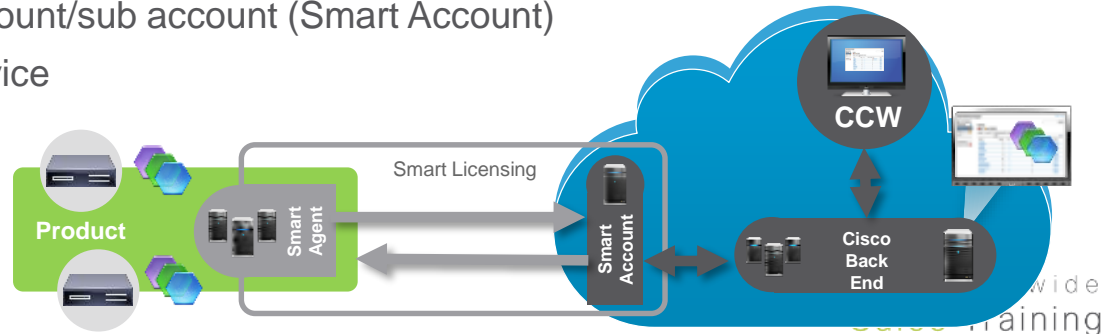


CSR 12.0: Licensing

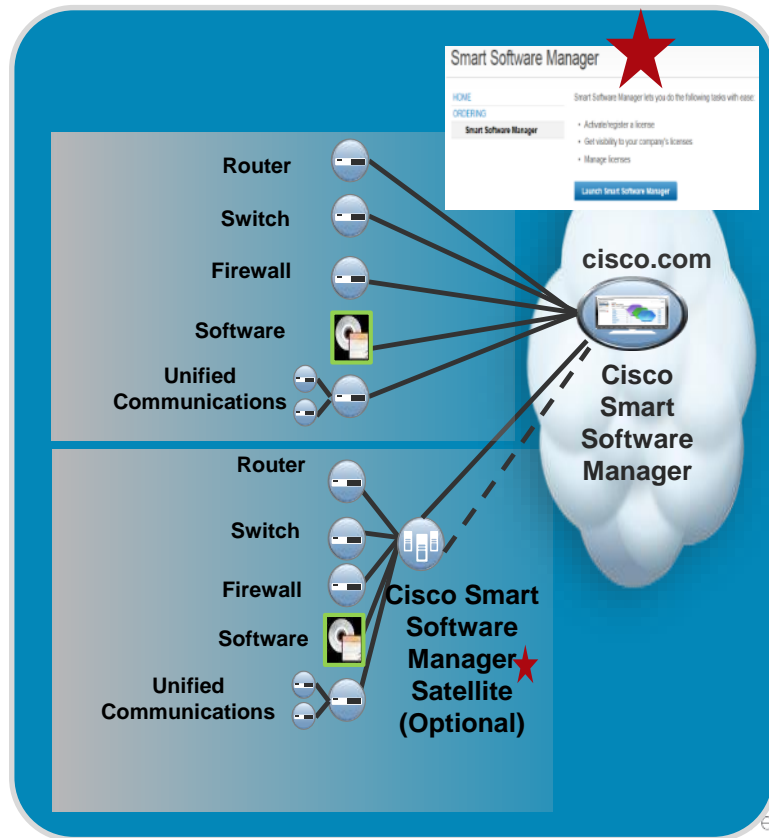
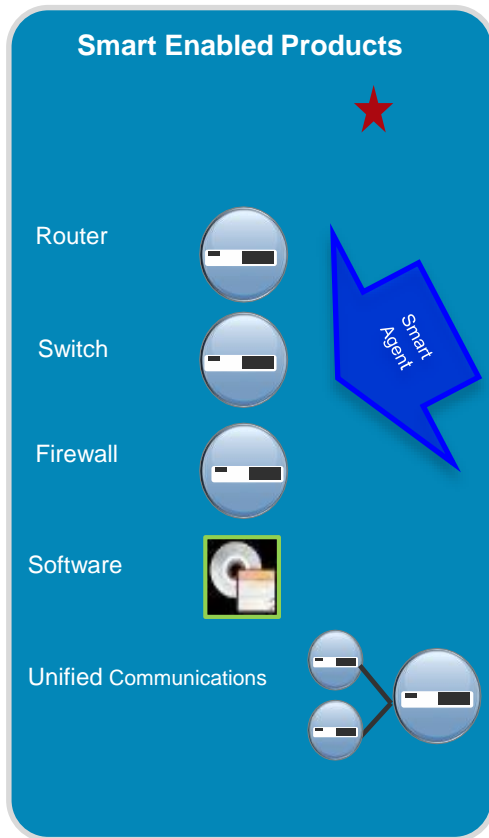
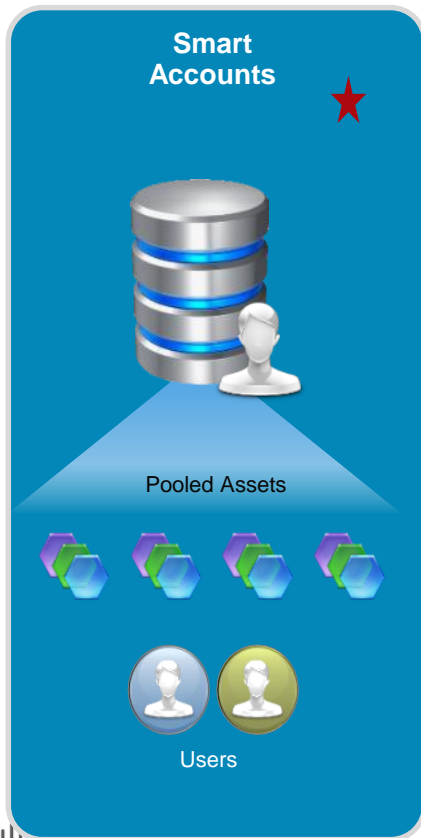
CSR 12.0: Licensing

What is Smart Licensing?

- A Software Inventory Management System that answers 2 questions:
 1. What have I purchased?
 2. What is it that I am using?
- Cisco Smart Software Licensing (CSSM)
 - A cloud based license compliance repository and checker
- License the CUSTOMER, not the Product Installation
 - All purchased licenses go directly into your Smart Account
 - Licenses are pooled for the entire account/sub account (Smart Account)
 - Licenses are not node-locked to a device
 - Easy registration. PAK eliminated.
- A Cisco-wide initiative



Smart Licensing Components



Smart License experience

Smart Account for "SS LAW FIRM"

Cisco Software Central > Smart Software Licensing

Smart Software Manager

Cloud Instance of Cisco
Smart Software
Licensing

Hello, Bob
Smith

SS Law Firm

Feedback Support Help

Alerts | **Inventory** | License Conversion | Reports | Email Notification | Satellites | Activity

Virtual Account: **UCM-NY**

Virtual Account for "SS LAW FIRM, UCM NY Branch"

General | **Licenses** | Product Instances | Event Log

License Reservation...



Search by License



License	Quantity	In Use	Surplus (+) / Shortage (-)	Alerts	Actions
UC Manager Basic License (12.x)	38	0	38		Transfer..
UC Manager Enhanced License (12.x)	13	0	13		Transfer..
UC Manager Enhanced Plus License (12.x)	16	0	16		Transfer..
UC Manager Essential License (12.x)	15	0	15		Transfer..
UC Manager Telepresence Room License (12.x)	10	0	10		Transfer..

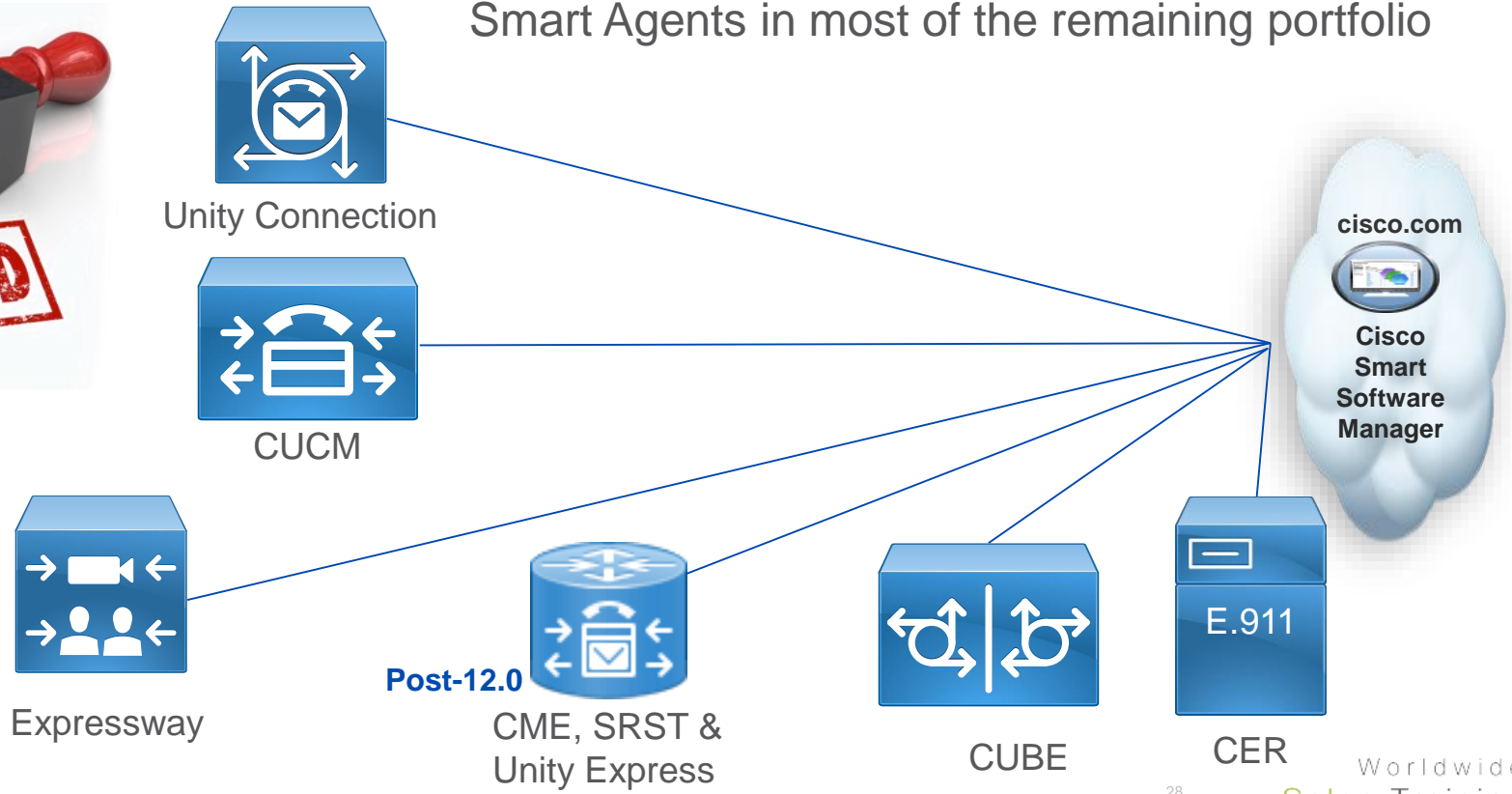
UCM License type, quantity, actions.

Showing All 5 Records

CSR 12.0: Licensing Enhancements



Smart Agents in most of the remaining portfolio



Chapter Censored...

CSR 12.0: Security & Compliance

CSR 12.0: Compliance & Security

PCI and TLS Primer

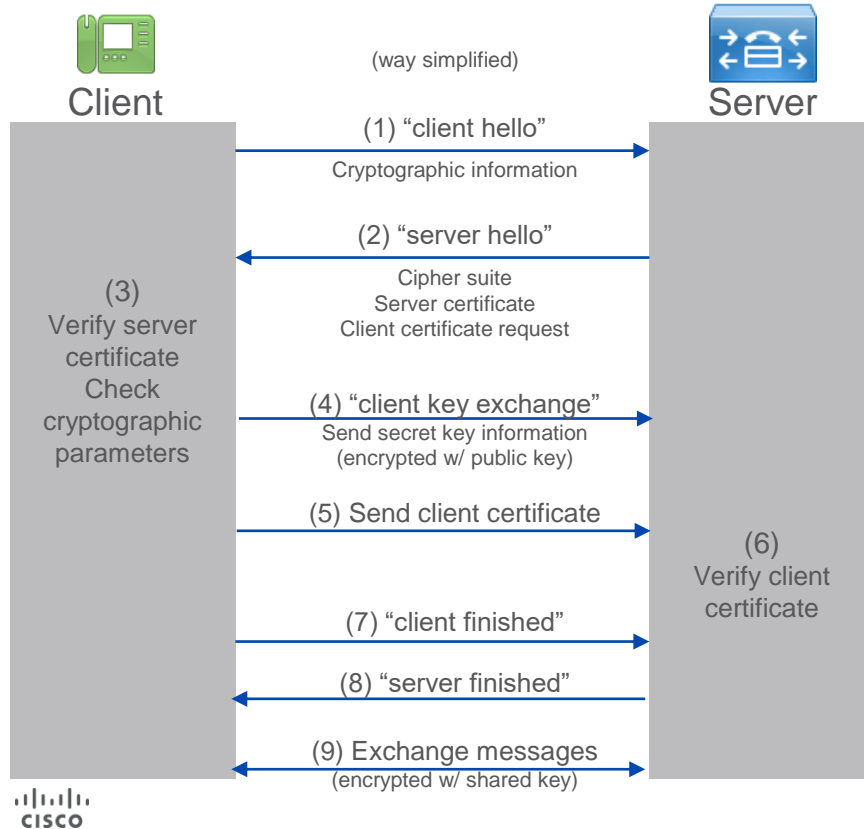


- **PCI = Payment Card Industry**
 - Sets standards for companies that touch customer credit card data
 - PCI Data Security Standards (DSS)
 - “PCI Compliant” = Businesses’ processes & deployments comply w/ DSS
 - Compliance is judged by 3rd party auditors
 - Non-compliance can result in finances and penalties
 - PCI DSS mandates “secure TLS” deployed no later than June 30, 2018
 - Yes, this applies to UC/VoIP (per PCI’s own guidelines/FAQ)
- **TLS = Transport Layer Security**
 - The S in HTTPS
 - Manages the encryption used on a connection
 - TLS 1.2 is latest standardized version, and considered most secure



CSR 12.0: Compliance & Security

TLS, Encryption & Certs in UC



TLS requirements involve

- TLS levels
- cipher suites
- certificates

The "client hello" includes:

- The highest TLS level the client supports
- A list of ciphers supported by the client.

The "server hello" response includes:

- The preferred TLS level, and
- The server's choice of ciphers from the client's list.

Certificates are exchanged to authenticate the server (and sometimes the client)

CSR 12.0: Compliance & Security

Phase 1 Requirements in a Nutshell



Communications using TLS for encryption *must* use TLS 1.2

- Allow disabling of TLS 1.0/1.1
- Start with server interfaces (infrastructure & endpoints)

CSR 12.0: Compliance & Security

Phase 1 Requirements in a Nutshell



Communications using TLS for encryption *must* use TLS 1.2

- Allow disabling of TLS 1.0/1.1
- Start with

Ciphers *must* be secure

- TLS_RSA with AES_128_CBC_SHA1
- TLS_ECDHE_RSA with AES128_GCM_SHA256
- TLS_ECDHE_RSA with AES256_GCM_SHA384
- No RC4; Prefer no 3DES

CSR 12.0: Compliance & Security

Phase 1 Requirements in a Nutshell



Communications using TLS for encryption *must* use TLS 1.2

- Allow disabling of TLS 1.0/1.1
- Start with

Ciphers *must* be secure

- TLS_RSA with AES 128 CBC SHA1
- TLS_EC
- TLS_EC
- No RC4

Certificates *must* be secure

- CA Certs:
 - SHA256 or higher; key size 2048 bit or greater – Mandatory
 - SHA384 or higher; key size 3078 or 4096 bits – HD
- Self-Signed or Factory Installed Certs:
 - SHA256 or higher; key size 2048 bit or greater – HD

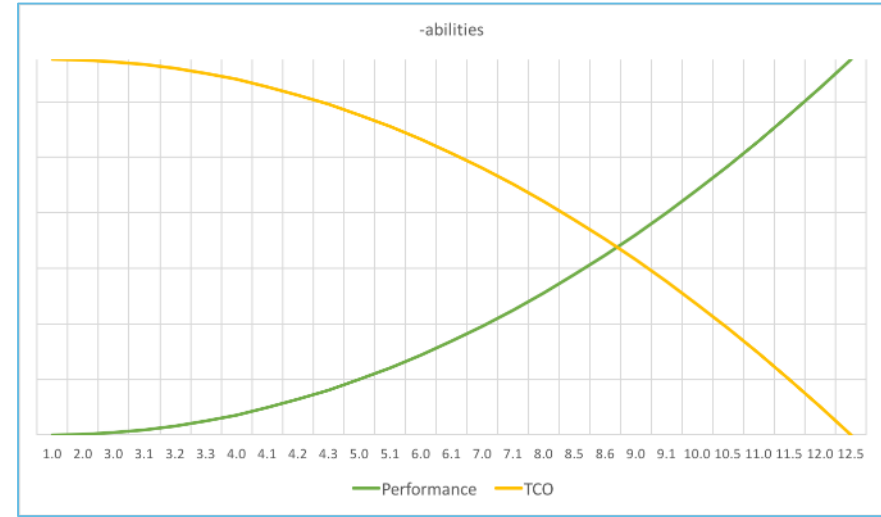
CSR 12.0: -abilities

CSR 12.0: -abilities

Upgrade-, Service-, Manage- & Deploy-ability

Reduce the TCO for our customers and partners.

- 10% improvement in UCM upgrade time
- Opus for Unity Connection
- Multiline for 7800/8800 phones on MRA
- ESXi 6.5
- UC Federation & Single Edge



Chapter Censored...

Desktop Endpoints: 7800, 8800, DX Series

CUCM 12.0 Phone Deprecation

- 7970, 7971, 7921

Phones removed in CUCM 11.5:

12S/SP/+, 30SP+/VIP, 7902G, 7905G, 7910/G/+SW,
7912G, 7920, 7935

Phone Endpoint Portfolio Overview

7811



7821



7841



7861



7832



HUDDLE ROOM



LOBBY / COMMON AREA

SMALL BUSINESS

KNOWLEDGE WORKER

ADMIN ASSISTANT

MANAGER/EXECUTIVE

CONFERENCE ROOM

8821



8811



8841/45



8851



8861/65



8831/32



Instant
Connect

Cisco IP Conference Phone 7832

Uncompromised Audio Conferencing for Small/Huddle Rooms



Cisco Spark

- Small conference/huddle rooms, private offices
- Meetings rooms up to 6 participants
- Sleek modern design
- Wideband for crystal clear audio and full-duplex speakerphone
- Rooms/offices up to 172 sq. ft (16 sq. m)
- Up to 7-ft (2.1-m) microphone pickup
- 3.4-inch (88-mm) backlit, monochrome display
- Mute button easily accessed from all angles
- Raised edge eases handling and repositioning
- Low-power IEEE Power over Ethernet Class 2
- Enhanced security with SHA-2
- Common experience with other 7800 Series
- Four context-sensitive soft-label keys
- Charcoal and white color options
- Cloud deployment with Cisco Spark™



Initial Release = Spark Registration

Cisco IP Conference Phone 7832

Hardware Features



New User Experiences in 11.7

11.5



11.5 Firmware

- Default wallpaper is blue
- Bottom softkey ribbon is black

11.7



11.7 Firmware

- Default wallpaper is brighter
- Bottom softkey ribbon is light
- Overall appearance is cleaner
- Better User Experience alignment with video portfolio running CE software

Collaboration Endpoint 9.1 Key Features

Support for Enterprise Wi-Fi security framework WPA-EAP
EAP methods supported:

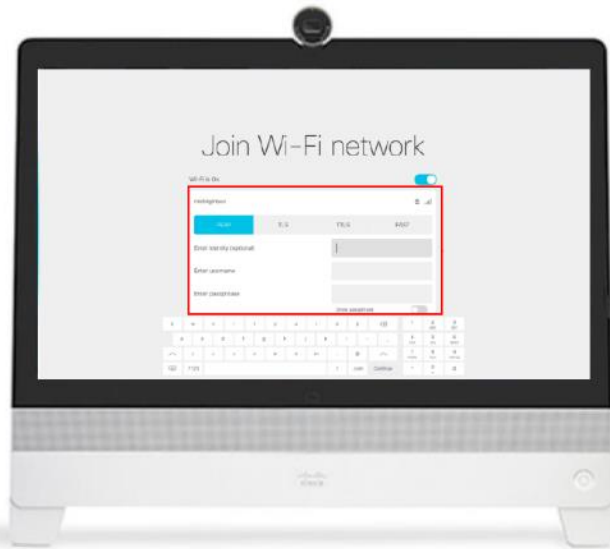
Supported security methods (WPA-EAP)

PEAP (Protected Extensible Authentication Protocol)
(Inner-authentication methods :EAP-MSCHAPv2, EAP-GTC)

TTLS (Tunneled Transport Layer Security)

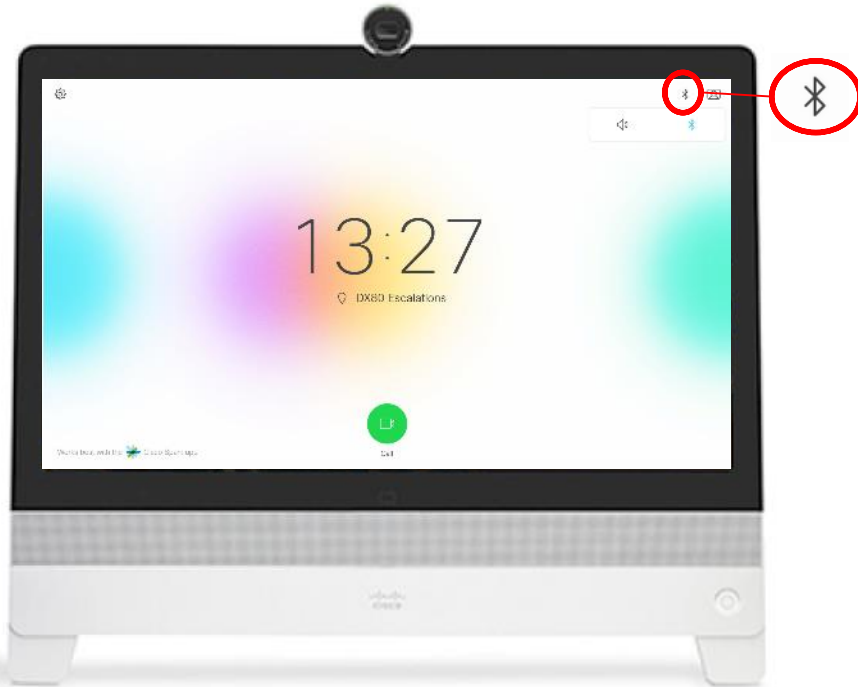
TLS (Transport Layer Security)

FAST (Flexible Authentication via Secure Tunneling)



Available now

Bluetooth headset support for DX70 and DX80



- Support for most Bluetooth headsets
- Simple pairing wizard
- Bluetooth control features (volume/mute etc.)
- Enabled by default
- Switch between Bluetooth headset, USB headset and speaker



Chapter Censored...

Jabber & VXME

Did you know....



Jabber now has
over 50 million
users...

..and is still growing

Have you heard....




Cisco has stopped developing and enhancing Jabber...



**Cisco Jabber
11.5**

**Experience,
Alignment
and Wearable**



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**Cisco Jabber
11.7**

**Over 20 new
features and
functions**



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**Cisco Jabber
11.8**

**November
2016**



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Cisco Jabber

11.9

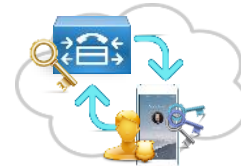
July 2017



iOS APNS Voice
Push Notifications



Jabber Fast
Login



UC Manager
OAuth



Off-Line Login



Office for Mac &
365 Web Client



Jabber to
Spark Messaging



Spark Space
Access



VXME
Enhancements



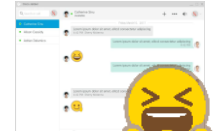
Fast WebEx
Escalation



WebEx Training &
Event Center



User Interface
Enhancements



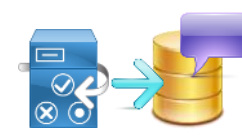
Animated
Emoji



New Device
Support



Centralized
IM&P Deployment



Enhanced
Message Archiver



IM&P Admin
Tools

Jabber 11.9 delivers Enhanced Architecture



Push Notification



OAuth



Off-Line Login



Fast Login

These features work together to enhance user experience which provides

- Improved Login flow
- Better Service offline handling
- Enhanced Authorisation
- Optimized for Mobile Devices

Optimized for Mobile Apple iOS Push Notifications

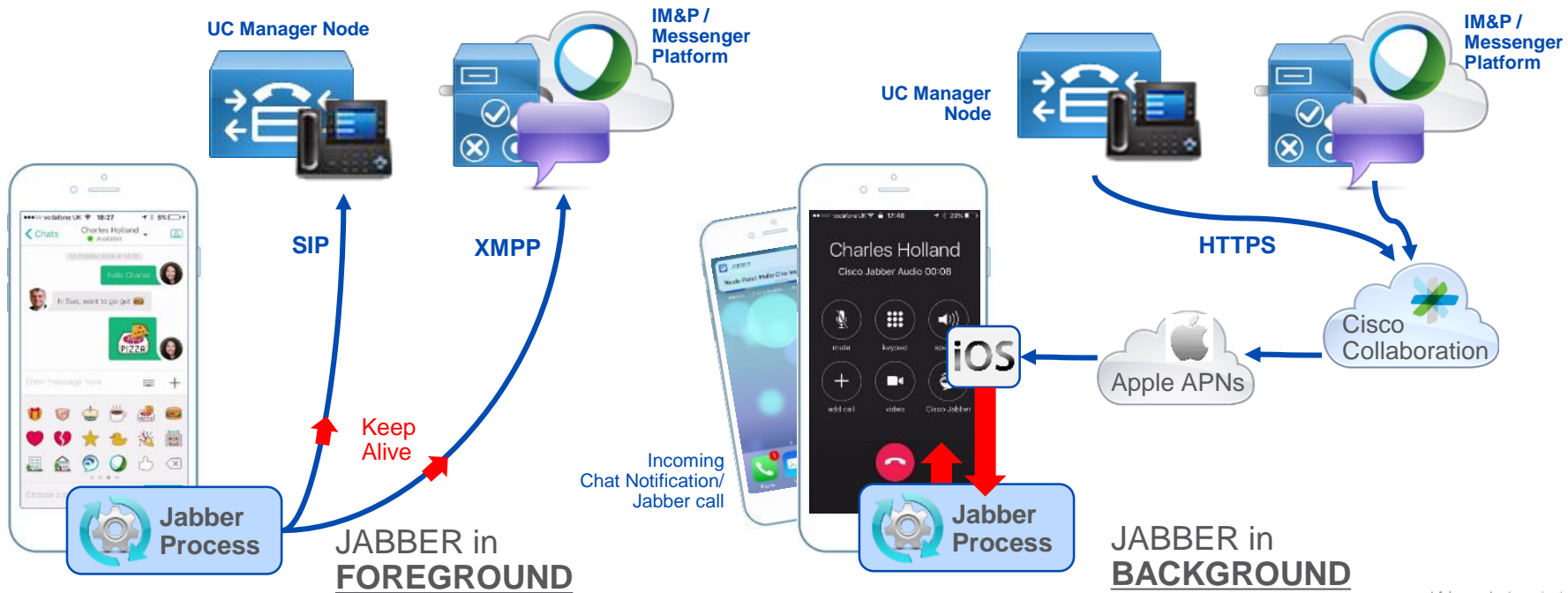


Jabber iOS customers should plan to migrate to push model before June 2018

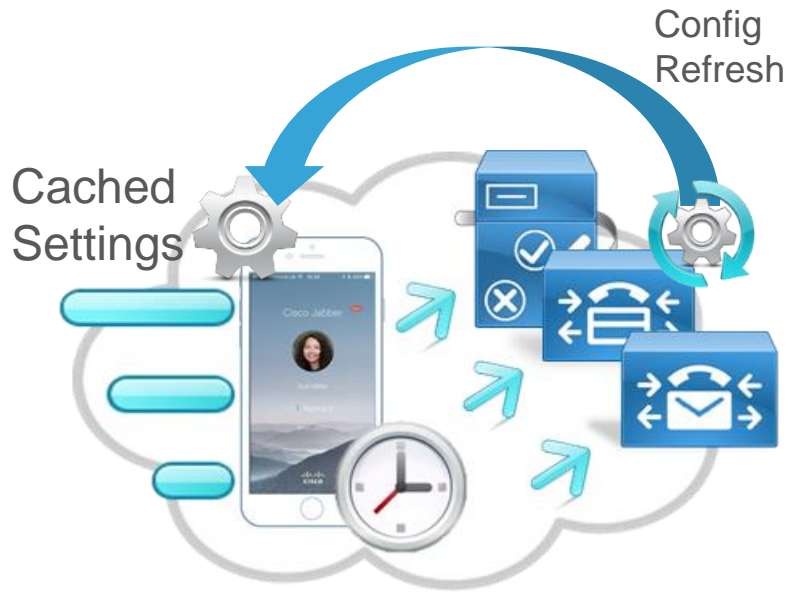
- Jabber 11.9 delivers on the Phase 2 of APNS support
- Delivered in combination with UC Manager release 11.5SU3
- Provides Push notification for incoming voice calls when Jabber in background/not running.
- Complements IM/Chat Push notifications delivered in Jabber 11.8MR

Push Notifications

iOS Push Notification Flows



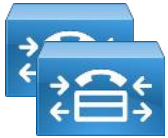
Enhanced Login flow with Jabber 11.9 Fast Login



- Enhanced Login flow now connects to services in parallel
- New cached configuration enables faster login process
- New background config refresh used to update cache
- Force Cache update available on client help menu

Jabber 11.9 Fast Login Login Example

1st Login



On first login client retrieves config and contacts



2nd Login

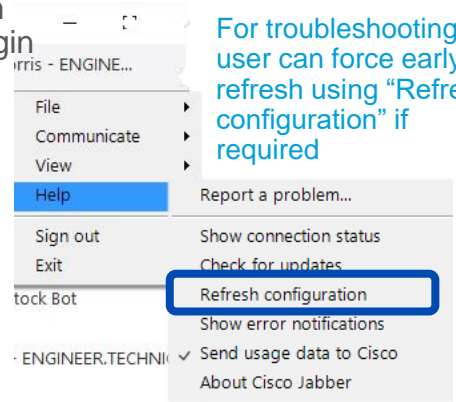


Config and contacts refreshed from server after login



* Config then refreshed for persistent connection every 7~9 hours

On next login config & contacts restored from local storage for fast login experience



For troubleshooting user can force early refresh using "Refresh configuration" if required



Offline service bypass with Off-Line Login



Note: Services must be available for first time login

- Prior to 11.9 Jabber was dependant on it primary authenticator..
 - Example: WebEx Messenger
- Jabber now connects to available services disabling features not available.
- Example:
 - No internet access to WebEx Messenger would not stop the use of voice/video services from UC Manager

Jabber 11.9 delivers Enhanced Authorisation

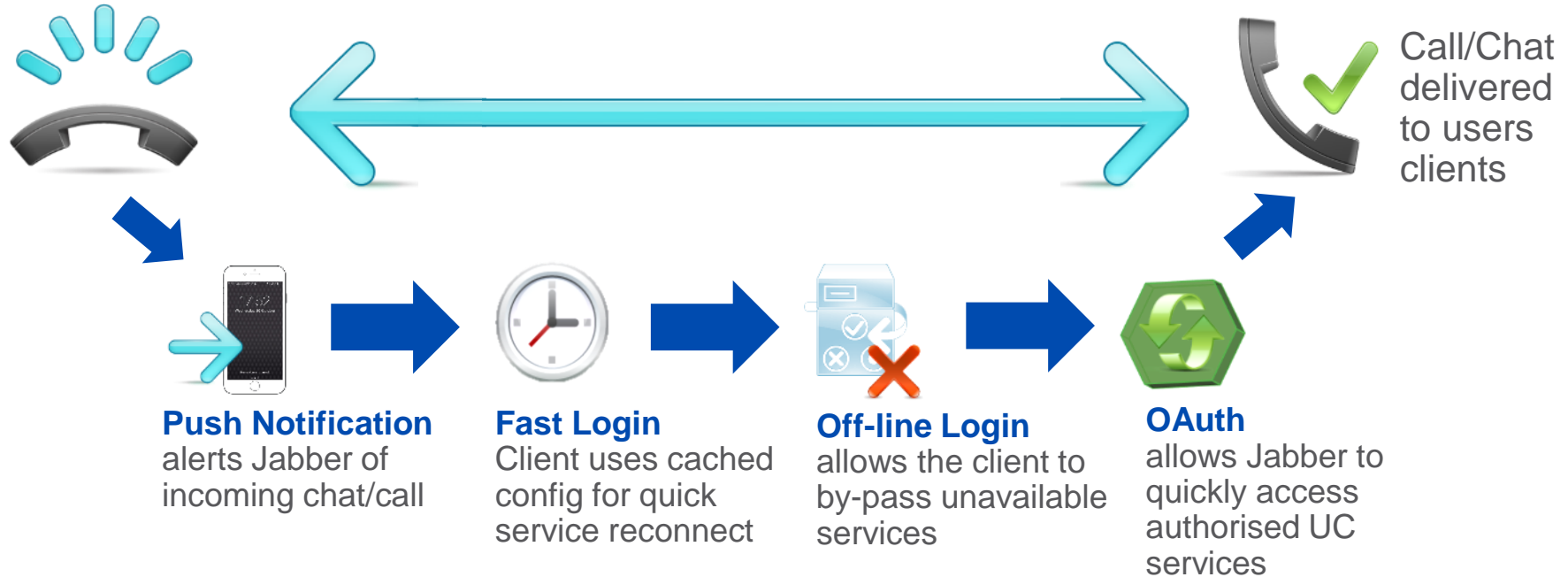


**OBS! Detaljer
i skjulte slides**

- OAuth v2 (Open Authorisation) is an open standard for token based authentication and authorisation
- UC Manager 11.5SU3+ provides OAuth support with **REFRESH** tokens
- Once authenticated Jabber is issued with access tokens which it uses to access services.
- Token based authorisation provides faster reconnect to services

Jabber 11.9 architecture

Putting it all together...



APNs

Infrastructure requirements



- Minimum versions

		CSR 11.6					CSR 12.0				
		UCM	UCM IM&P	WebEx Msg	EXP	Jabber iOS	UCM	UCM IM&P	WebEx Msg	EXP	Jabber iOS
Prem	IM&P	11.5 SU2	11.5 SU2		X8.9.1	11.8MR	12.0	12.0		X8.10	11.9
	Voice	11.5 SU3	11.5 SU3		X8.9.1	11.9	12.0	12.0		X8.10	11.9
Cloud	IM&P			Deployed		11.8MR			Deployed		11.9
	Voice					None					

Jabber 11.9 Integrations Office 2016 for Mac

Cisco has been working with Microsoft to add include a presence API in office 2016 Mac.

Jabber for Mac users now have presence and communication launch from office contact card



Show Presence



Start Chat Session



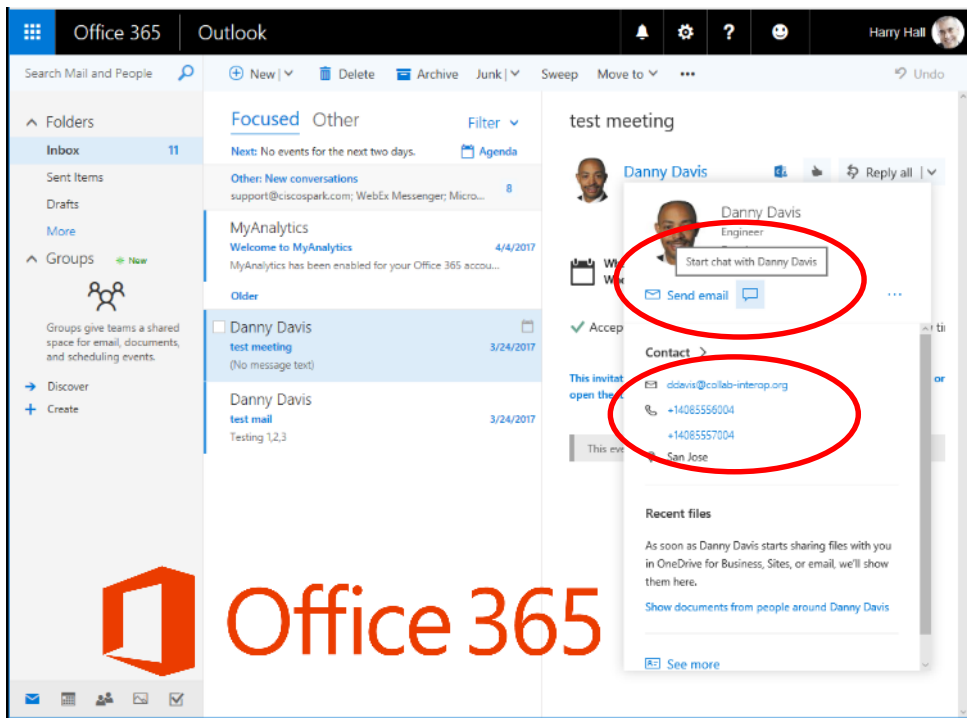
Make Voice/Video Calls

The screenshot shows the Office 2016 for Mac interface. At the top, there's a blue header bar with the text "Team Meeting - Inbox" and a "Message" button. Below this is a toolbar with various email actions: Delete, Archive, Reply, Reply All, Forward, Move, Junk, Rules, Read/Unread, Categorize, and Follow Up. The main content area displays an email from "Team Meeting" dated "wednesday, 26 April 2017 at 18:17". The recipient list includes Alice Adams, Bob Banks, Carol Chang, and Danny Davis. A contact card for "aadams@collab-interop..." is overlaid on the email, showing the contact's name, title "Sales Manager", and work/mobile phone numbers. The contact card has a green presence indicator and a "Available" status. At the bottom of the contact card, there are icons for chat, voice call, video call, and other communication options. Red circles highlight the green presence indicator, the chat icon, and the voice call icon.

Office 2016

V15.33 and later

Jabber 11.9 Integrations Office 365 Outlook Web Client



... And customers using Office 365 Outlook Web access can also launch Jabber Chat and calls...



Start Chat

Chat icon can now launch Jabber

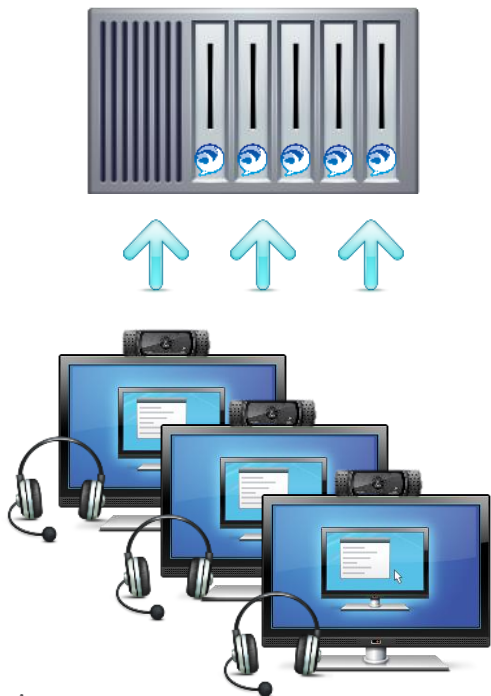


Make a Call

Click telephone numbers to call

No presence in OWA

Jabber 11.9 virtualisation VXME Enhancements



- New solution support for

✓ **CITRIX**
XenDesktop 7.12

✓ **CITRIX**
XenApp 7.12

✓ **vmware**
Horizon 7

✓ **eLUX**
Unicon Elux
5.5

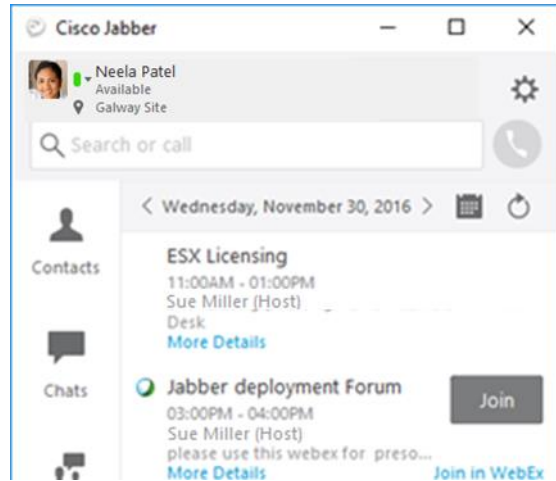
✓ **Microsoft**
Windows
10 IOT

✓ **hp**
ThinPro
6.1

- Adds Graceful de/re-registration for VXME clients

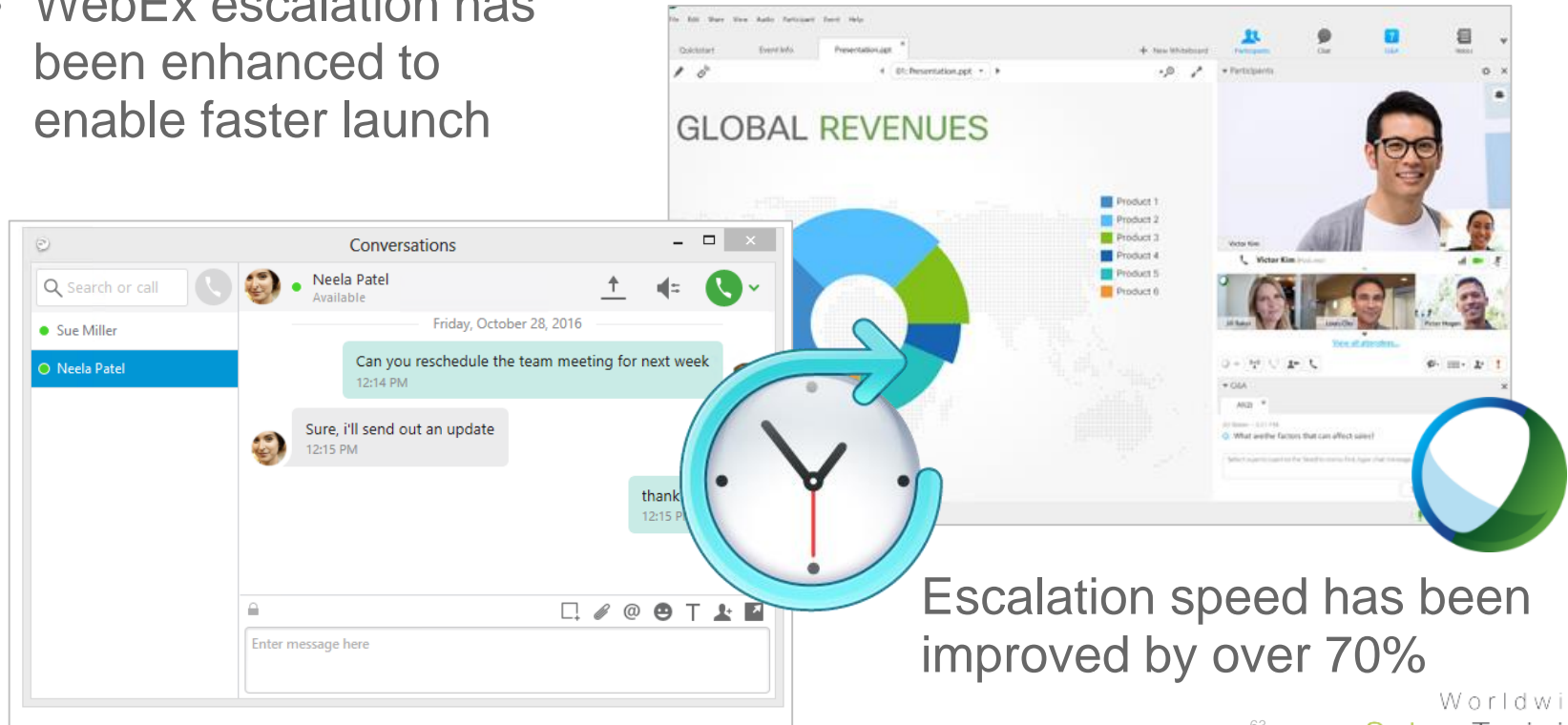
Jabber 11.9 with WebEx Support for WebEx Centers

- Jabber Meetings Tab now supports all WebEx Centers
- All meetings types now appear and can be launched



Jabber 11.9 with WebEx Escalation to WebEx

- WebEx escalation has been enhanced to enable faster launch



The image displays two overlapping windows from the Jabber 11.9 interface. The foreground window is a chat conversation titled "Conversations" with a search bar and a list of contacts including Sue Miller and Neela Patel. The chat history shows a message from Neela Patel asking to reschedule a meeting, followed by a response from Sue Miller. The background window is a WebEx meeting titled "Presentation.ppt" showing a slide titled "GLOBAL REVENUES" with a world map and a legend for Product 1 through Product 6. A large blue and green circular arrow graphic is overlaid on the chat window, and a clock icon is positioned in the center of the image.

Escalation speed has been improved by over 70%

Jabber 11.9 device support

New Device Support



Google
Pixel



Sony
XZ



Huawei
Mate 9



Jabber is now supported
on all **SAMSUNG** phones which
meet minimum hardware
requirements

In Summary

- 50 Million users and growing...
- Active Cisco development team
- Jabber 11.9 is scheduled to ship next month with multiple new features
- New enhancements to UC Manager makes Jabber solution even stronger
- Team actively working on next release including multi-line



Og nu trænger I vist

også til en



Chapter Censored...

Room Kit Technical Update

Cisco Spark Room Kits

Room Kit



Optimized for rooms up to 7 persons.



Room Kit Plus

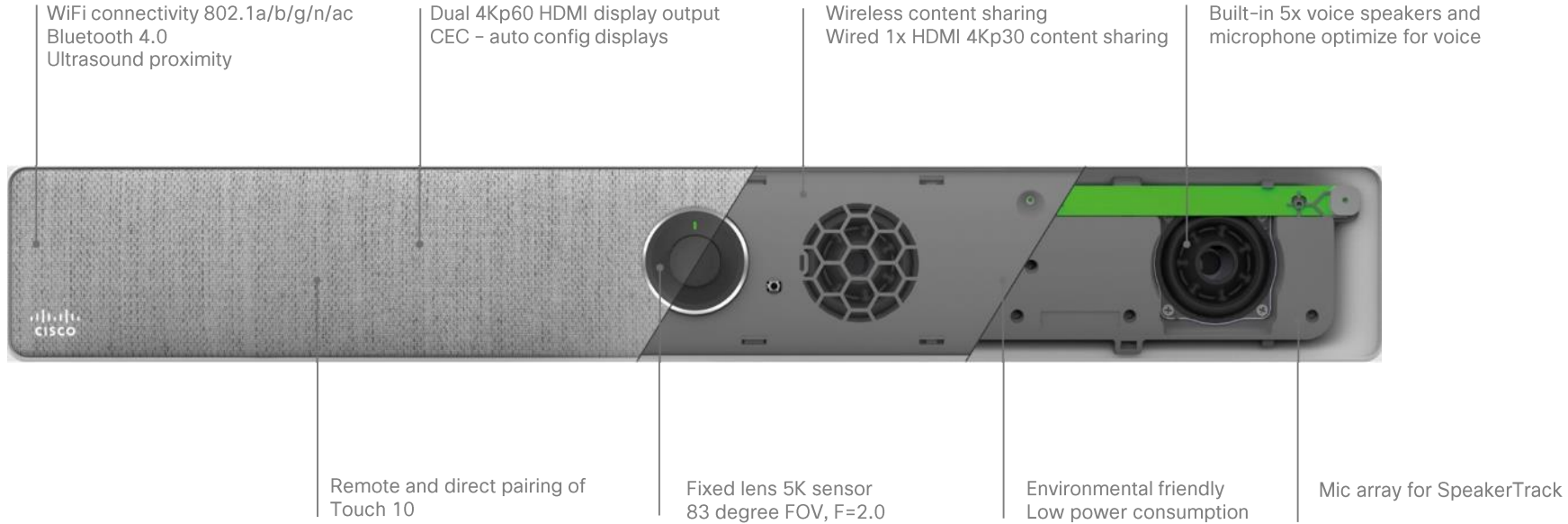


Optimized for rooms up to 14 persons.



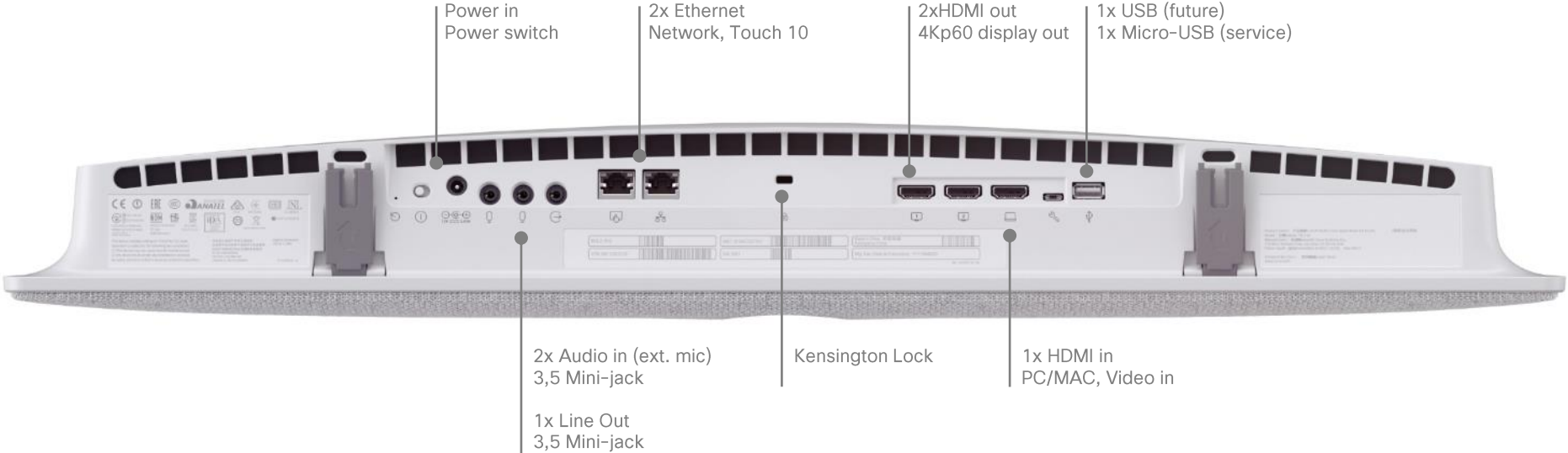
Technical

Cisco Spark Room Kit



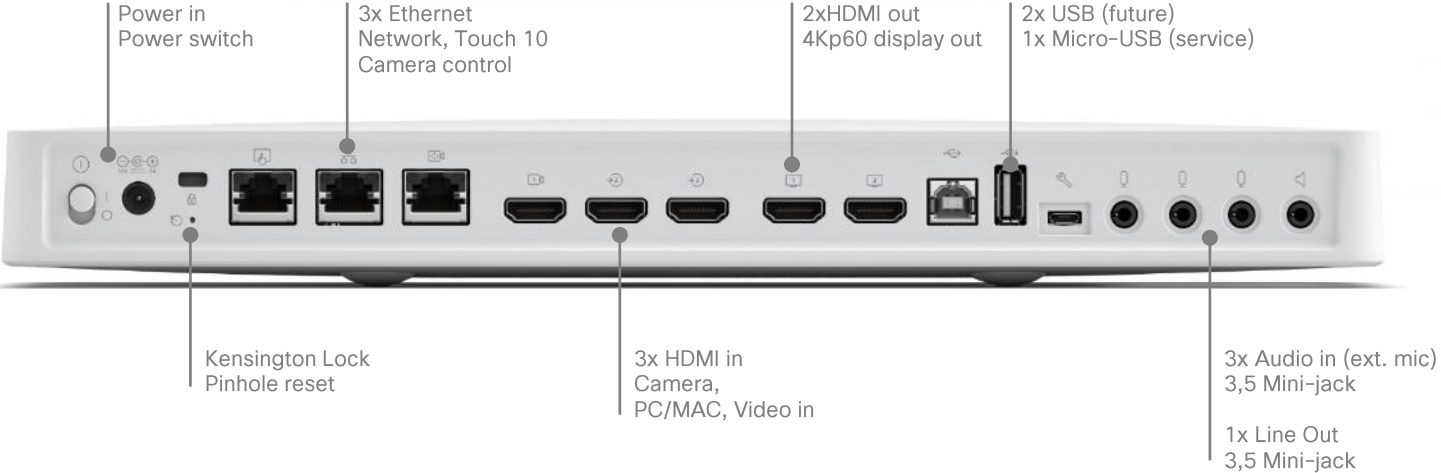
Technical specifications

Cisco Spark Room Kit

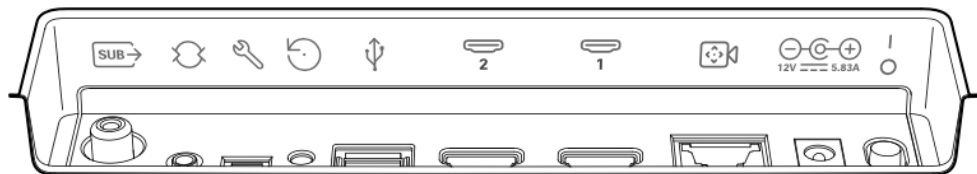


Technical specifications

Cisco Spark Room Kit Plus



The Quad Camera connector panel



Sub-woofer output

Line Input

mUSB for debug

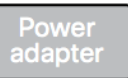
Factory reset

USB-A

HDMI output



Power On/Off



Power
(100-240 VAC, 50/60 Hz)



Always use the provided power
adapter for the codec (FSP070)

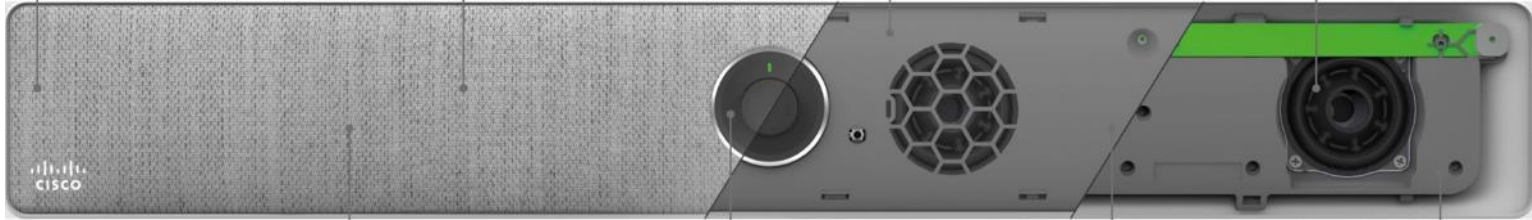
Camera control (Ethernet, RJ-45)

Video (from HDMI 1 on the camera to HDMI Main Camera on the codec)

Microphones

- Room Kit has one embedded microphone
 - Two additional microphone inputs, for Table Microphone 20 or Cisco Ceiling Microphone
 - Third party microphone systems can be used
- Room Kit Plus has no embedded microphone
 - Be sure to order at least one
 - Three microphone inputs on the codec

Room Kit Camera



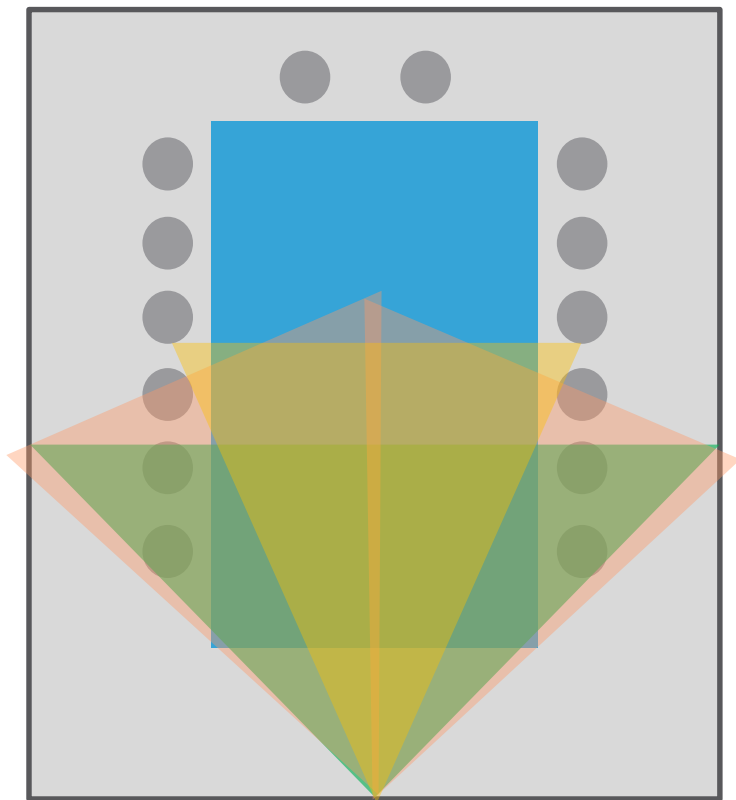
- There is one camera, with an 83 degree horizontal field of view
 - This is the same as the HFOV for the SX10 – one of the widest in the industry
- Project Workplace says “for rooms up to 6 meters / 20 feet”
 - In practical terms, this means that the farthest participant from the camera should be 5 meters or less
 - Digital zoom is maximum 3X

Room Kit Plus – Quad Camera



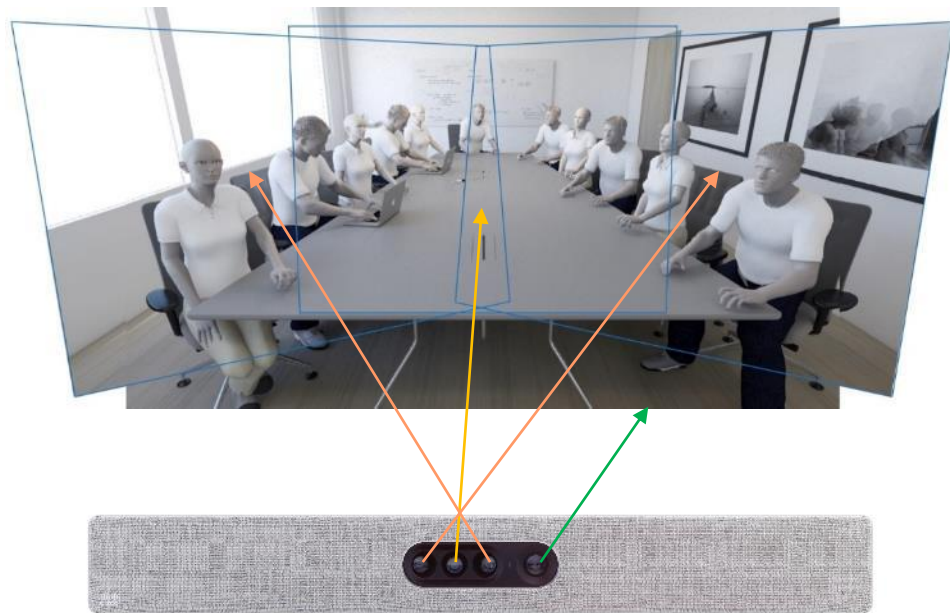
- There are four cameras, one with an 83 degree horizontal field of view
 - This overview camera is the same camera as on the Room Kit
- Project Workplace says “for rooms up to 9 meters / 30 feet”
 - However, people can be seated as far away as 10 meters and they will be tracked
 - Digital zoom is effectively about 6X. Each camera can zoom 2.63X

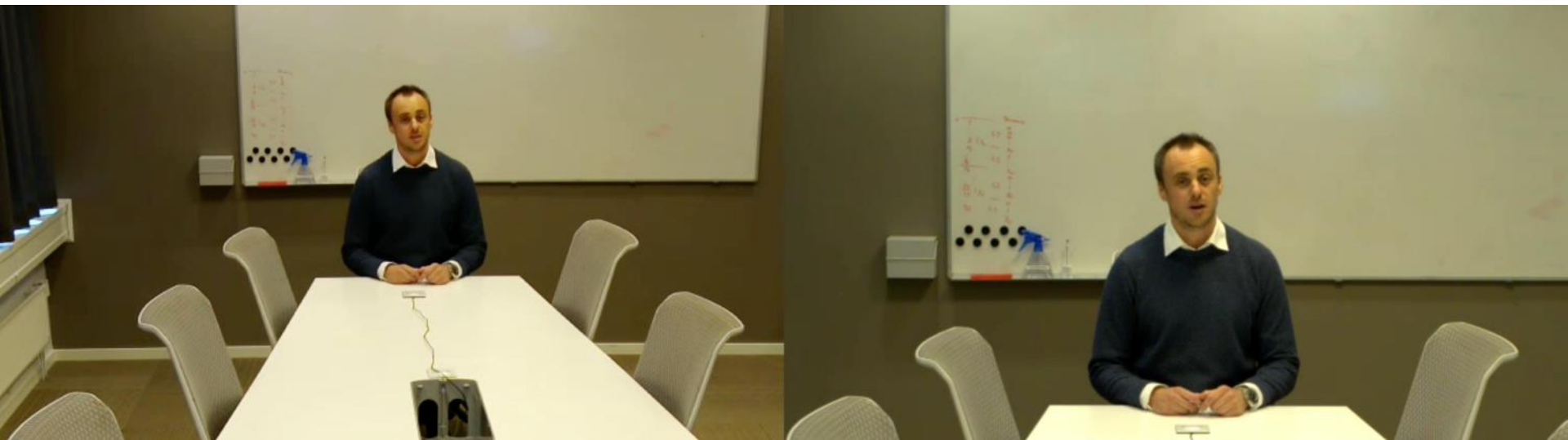
How the Quad Camera works



1x Overview lens, FOV 83 degree
3x Tele lens, FOV 50 degree

6x digital zoom => Maintain native 1080p
More light => Less noise => Less bandwidth needed





This frame grab from a video shows the zoom of the Room Kit on the left, and the Room Kit Plus on the right

“SpeakerTrack 2.0”

- Both Room Kit and Room Kit Plus use speaker tracking technology
 - This includes Best Overview and tracking the active speaker
 - These same features are in SpeakerTrack for SX80 and MX700/800, but there are differences
 - Room Kit cameras have no moving parts – all pan/tilt/zoom is digital
 - As a result, tracking is much faster and more accurate

Intelligent framing for clearer communication

Best View



Auto-detect people in room



Selects best framing



People Count – New Feature

- Room Kit and Room Kit Plus can report through the API how many people are in the room
 - Requires on-prem endpoint
 - The API command is **xStatus RoomAnalytics PeopleCount Current**
 - **xFeedback /Status/RoomAnalytics/PeopleCount/Current** will report changes as people come in the room and leave
 - CE9.1 software is required

Black/Grey Square = Best Overview (What the Far End will See)

Green Square = Face Detected



Two Green Squares = Face Detected & Speaking Participant

Dual 4K Monitors (UHD)



- 4K 60fps to screen
- Local presentation at 4K 30fps (using HDMI)
- Share presentation at 4K 5fps
- Wireless share at 1080p

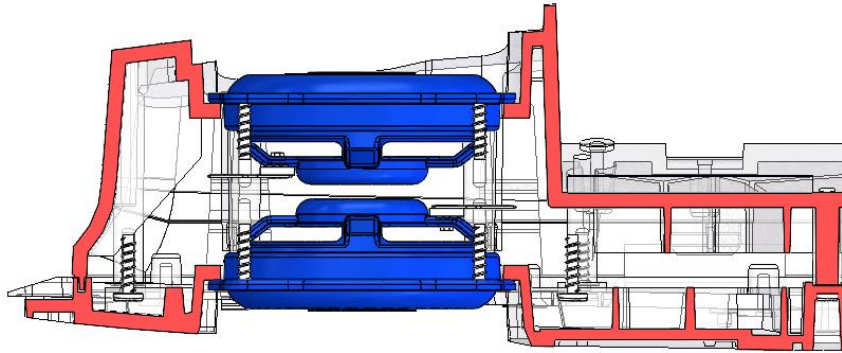
Various Features

- 4K UHD presentation support
 - First standards-based endpoint to support 4K presentation
 - SX and MX platforms are not capable of 4K
- H.265 on Main Video channel
 - Presentation channel uses H.264
 - Identical to SX80 and MX700/800
- H.263 is not supported
 - MXP dual stream interop is therefore not supported

Various Features

- Room Kits can be on-prem or registered to Spark
 - On-prem to CUCM, VCS, third-party, or standalone
 - Identical to SX and MX in that respect
- H.323 is supported, as well as SIP and Spark Calling
- ISDN Link is not supported

Innovative speaker design



Audio is key, and the most used conferencing solution today. To create the best possible audio experience for people in the room and on the remote end we need to control all audio devices in the room. It was therefore a key priority for us to include speakers in our next generation collaboration solution.

On doing so we were however soon faced with a technical challenge: How can we provide an excellent audio and at the same time have the camera deliver the high quality experience we were aiming for.

In other words, minimize vibrations to the camera. The engineering team came up with an innovative approach that virtually eliminates the vibrations from the speakers. The Spark room Kit S has several small speaker drivers that are playing both towards the front and the back in a balanced configuration. This makes it possible to provide a high quality audio and amazing experiences through our camera.

Touch 10

- Touch 10 ships with both Room Kits
 - Remote control not supported
 - Touch 10 can be used to control environment, by using In-Room Control
 - PoE injector is required for Room Kit
 - PoE injector is *not* required for Room Kit Plus

Camera Above versus Below the Display

- The **Room Kit** camera is optimized for mounting above the display
 - The maximum display size should be 70 inches
 - Larger displays will place the camera lens too high
 - The camera has a downward tilt of 15 degrees – therefore mounting the camera below a screen is a bit difficult
 - However, with any display larger than 70 inches, it is really necessary to mount the camera below the screen

Camera Above versus Below the Display

- The **Room Kit Plus** Quad Camera is optimal for mounting above or below the display
 - The camera has no downward tilt
 - As a rule of thumb, with any display larger than 70 inches, it is necessary to mount the camera below the screen.
 - The Best Practices download on Project Workplace has camera height guidelines.
 - In general, camera lenses should be between 48 (1,21m) and 72 (1,82m) inches above the floor, for a standard conference room

Configurations

Below the screen



Above the screen



LG 4K Displays

- A selection of LG 4K displays has been tested and certified for use with Room Kit and Room Kit Plus
- Advanced CEC functionality is used – Consumer Electronics Control
 - The displays will turn off when the Room Kit goes into Standby, and automatically turn back on when the codec comes out of Standby
 - The screen is automatically configured for low latency mode
 - If another device is being used on a different input (like for instance an Apple TV), and the codec receives an incoming call, the screen will automatically switch to the Room Kit so the call can be answered

Cisco Spark Room Kit

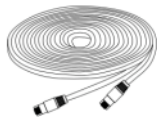
What's in the box!



Touch controller



Power adapter for Touch controller



Network cable, flat,
for Touch controller
8 m / 26.2 ft



Mediabar



Power adapter for mediabar



HDMI cable 1.5 m / 4.9 ft



2 x Network cables, round
5 m / 16.4 ft



Screen mount



Wall mount bar



2 x wall bracket

Accessories (ordered separately)

- 2 x Cisco TelePresence Table Mic 20
- 2 x Microphone extension cable
- HDMI second monitor cable 1.5 m / 4.9 ft
- HDMI presentation cable 8 m / 26.2 ft
- Cisco TelePresence Ceiling Mic

Cisco Spark Room Kit Plus

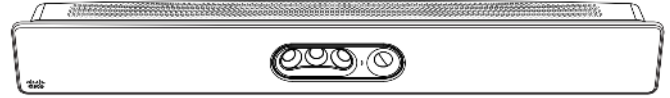
What's in the box!



Quad Camera wall bracket



Power adapter and cable



Cisco Spark Quad Camera



Cisco Spark Codec Plus



Power adapter and cable



Cisco Touch 10



Ethernet cable (PoE)

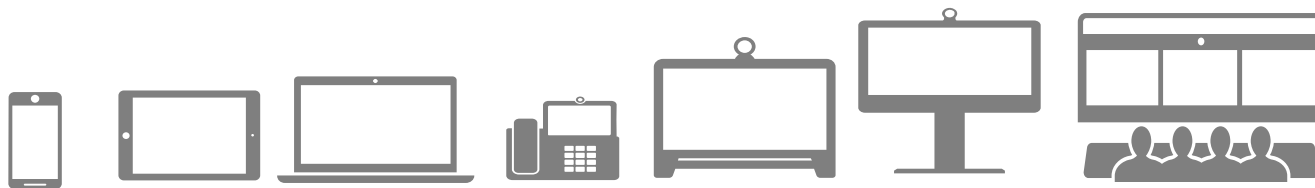
Accessories (ordered separately)

- Codec Plus Wall Mount Kit
- Microphone(s)
- Cables. We recommend that you order the HDMI and Ethernet cables from Cisco:
 - HDMI cables as required. If you have 4K screens or 4K presentation sources we recommend HighSpeed HDMI cables (HDMI2.0 compliant).
 - Ethernet cables as required. You need one for camera control and, if not using the wireless LAN, you need one for connecting the codec to the network.

Chapter Censored...

Cisco Meeting Server

Industry Leading Meeting Experiences – Your Way



Hear

Share

Draw

See

Continuous Collaboration



Cisco Spark

Meetings



WebEx



Cisco Meeting Server

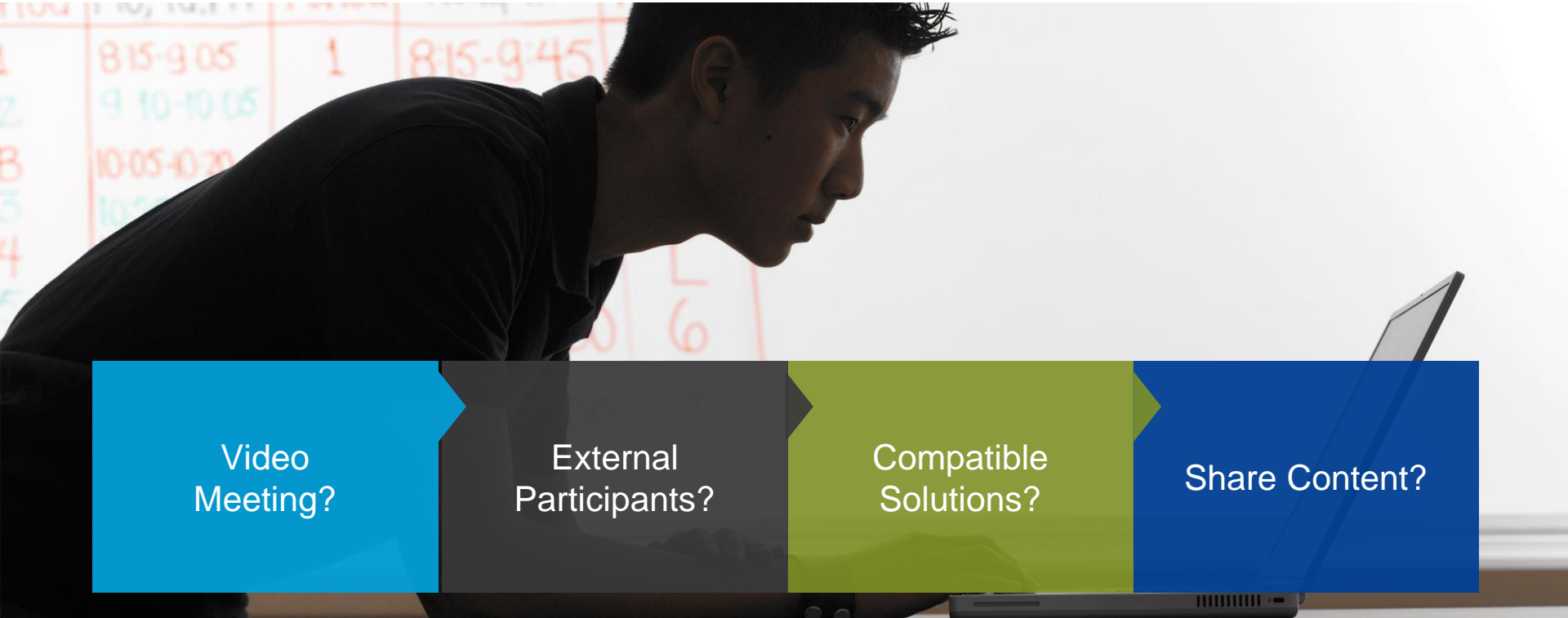
Cloud and Hybrid



On-premises



A Day in the Life of a Collaboration User



Video Meeting?

External Participants?

Compatible Solutions?

Share Content?

CMS: Focus Areas

Ease of Use

Scale

Open and Interoperable

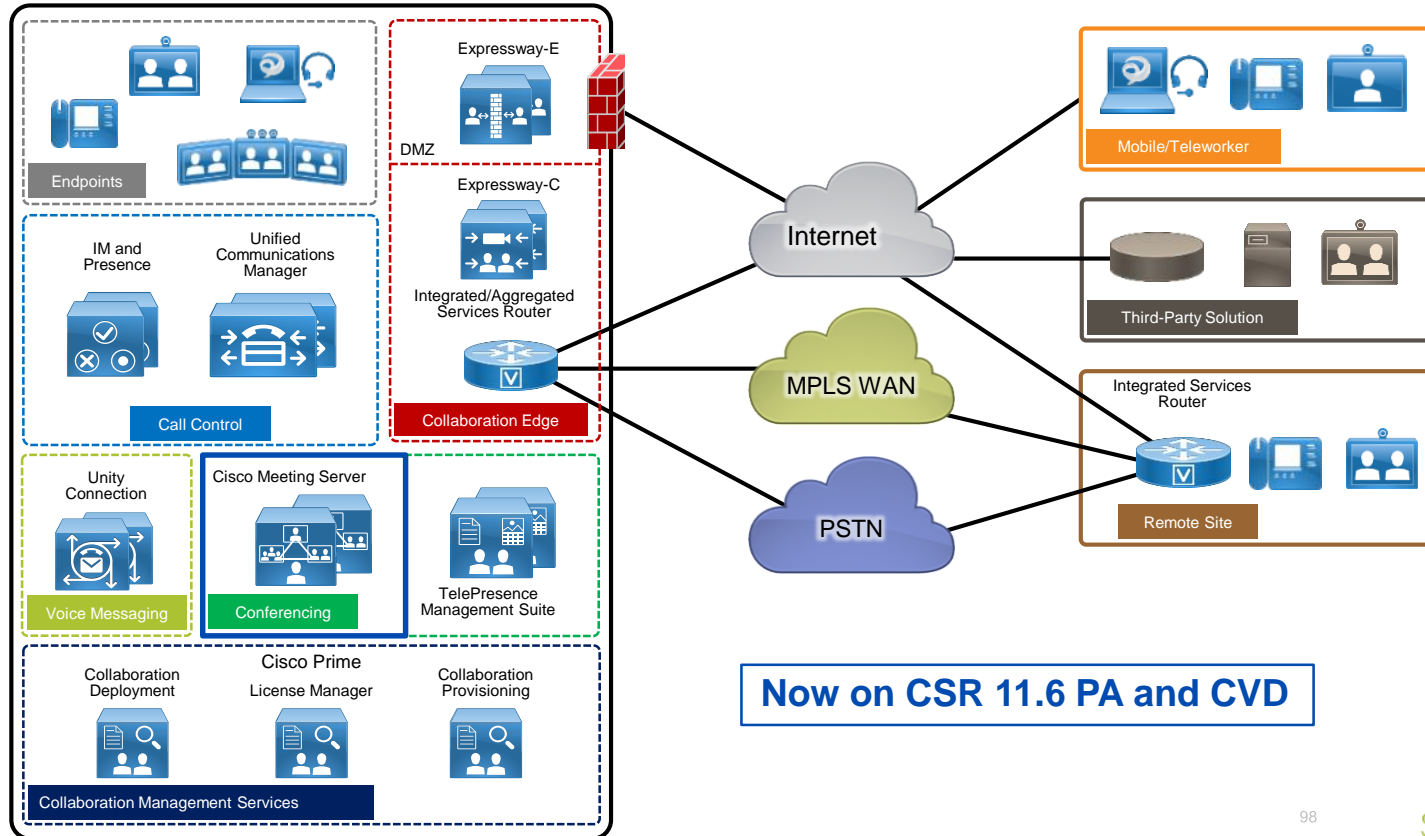


Pervasive deployment and adoption: Video in every room

Cisco Meeting Server Solution Architecture

Component	Description
Call Control	Standards SIP Trunk
Collaboration Edge	Cisco Meeting Server Edge Cisco Expressway Edge
Scheduling	Cisco TelePresence Management Suite Microsoft Outlook
Recording and Streaming	Cisco CMS Services
Meeting Applications	Cisco Meeting Application Software Cisco Meeting Application Mobile Cisco Meeting Application WebRTC
Video Endpoints	Standards SIP
Conference Management	Cisco TMS Scheduling
Customization and extensibility	CMS API

Cisco Collaboration Preferred Architecture



CMS Hardware platforms



CMS1000

- Based On UCS C220 M4S
- Requires VMWare
- Capacity:
 - Up to 96 720p30 video screens or 3000 audio ports



CMS2000

- Single Large Scale call Bridge
 - Based on UCS 5108 chassis and 8 x B200 blades
 - Bare metal install (no VMWare)
 - Supports core call bridge applications
 - Call bridge, webbridge, database, XMPP
- Capacity
 - Up to 500 720p30 screens or 3000 audio ports

Load Balancing of Outbound SIP Calls

How does it work?

- Call bridge group was introduced in CMS 2.1 to load balance inbound SIP calls
- CMS 2.2 allows Call bridge group to load balance outbound SIP calls
- Set **loadBalanceOutgoingCalls** parameter to “true” on the API object **/callBridgeGroups**
- Setup outbound dial plan rules to load balance outbound call via API
 - For call bridge scope, load balancing uses the call bridge group associated with the call bridge specified by the **callBridge** parameter in **/outboundDialPlanRules** API object
 - For call bridge group scope, load balancing uses the call bridge group specified by the **callBridgeGroup** parameter in **/outboundDialPlanRules** API object
- Specify a call bridge group in the **callBridgeGroup** parameter of **/calls/<call id>/participants** when using this API object to make outbound call
- **Note:** Call bridge groups cannot load balance Lync or CMA calls

Skype for Business O365 Support with OBTP

Intuitive Interoperability



- Requires TMS15.5, TMS-XE 5.5 & CMS 2.2 (available now)
- Maintain the Microsoft experience when scheduling meetings using the Skype Outlook plug-in
- Cisco endpoints join with OBTP
- O365 clients maintain their user experience with dual-homed technology

Microsoft O365 Support

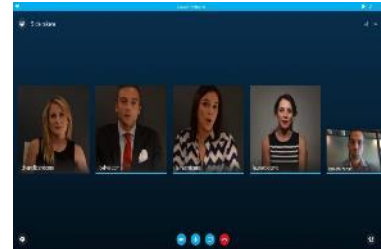
Conference Types

Spaces (Rendezvous): Standard Room endpoints and Lync/Skype for Business users all connect on CMS for best experience & content sharing

Dual Home Conferencing: Standards room endpoints connect on CMS with connection to Lync/Skype for Business meetings as full-featured participants (video, audio, & content)

Gateway: Allows calling between standards room endpoints and Lync/Skype for Business

Dual Homed Conference

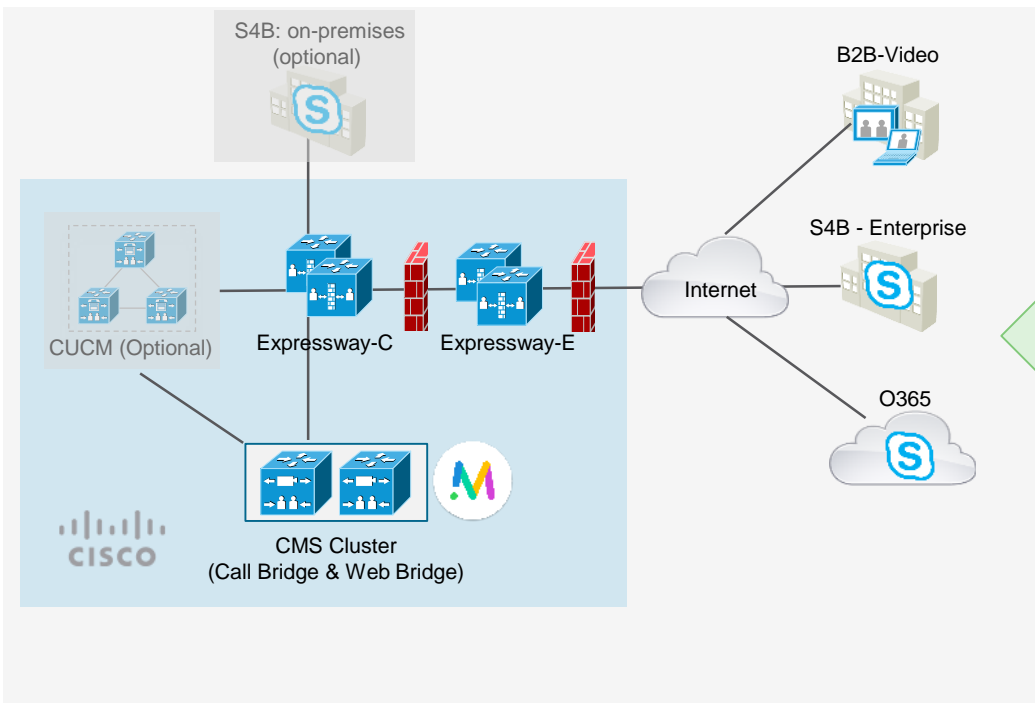


Gateway Conference



Core video architecture

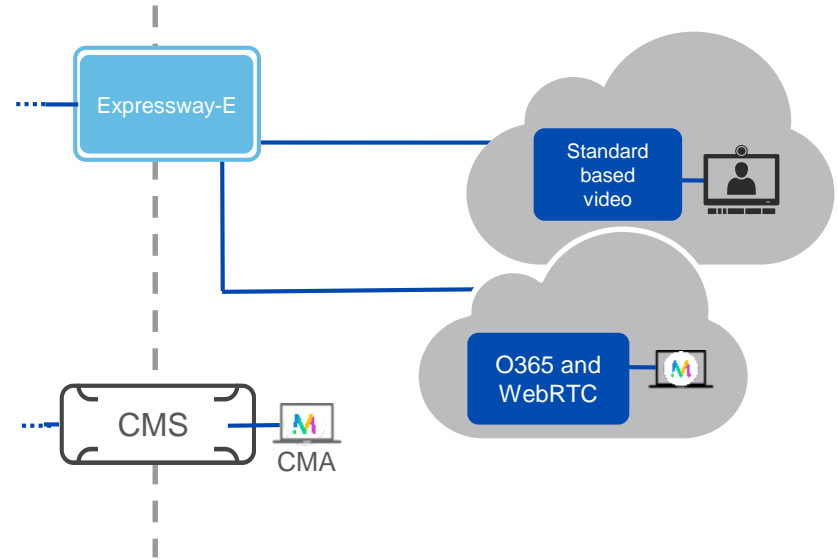
CMS+Expressway for Microsoft Interop



- Delivering on “Single Edge” plans
 - Common architecture for multiple deployment scenarios
- Licensing Improvements
 - Common licensing for UCM and Expressway
 - RMS licensing only required for B2B calling scenarios
 - Dual Home with O365 consumes RMS per video endpoint
 - CMS SMP Licensing Ratio for Gateway calls
- Minimum versions:
 - CMS 2.2
 - XC8.9 (8.10 recommended)
 - UCM 11.5 SU2
- New deployment guides in progress

Single Edge Architecture

- Journey begins to move from CMS Edge to Expressway for single edge
- Expressway XC8.9.2 supporting WebRTC (Port 443 in future release)
- Office 365/ Skype for Business via Expressway recommended architecture



Layout Support For Dual Screen Endpoints

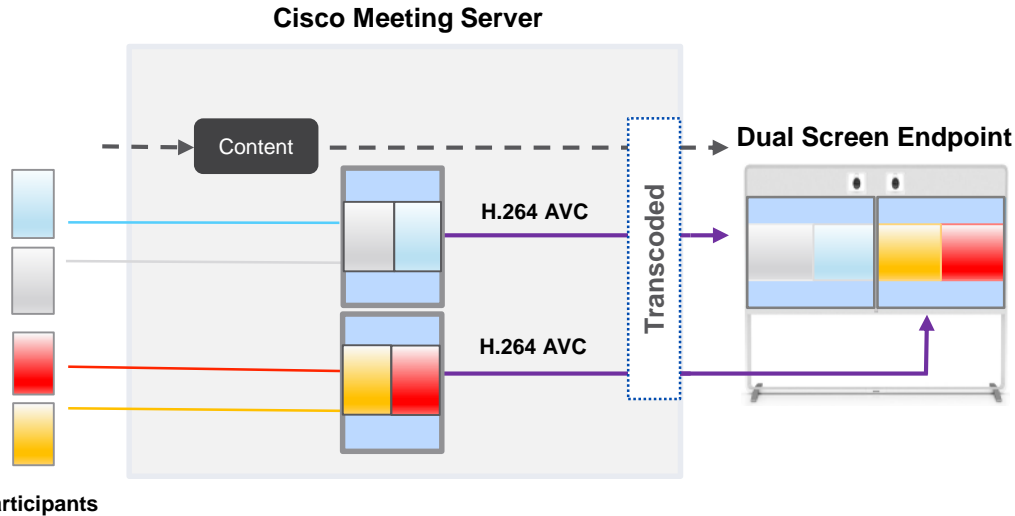
Better Cisco Collaboration Experience



- Requires CMS 2.2 and CE9.1.1 (available now)
- Receive video on both screens on dual screen endpoints, when not sharing content
- 4 dual screen layouts available
- Supported: SX80, MX800 Dual, MX700 Dual, Spark Kit, Spark Kit Plus with dual monitors

Dual Screen Feature

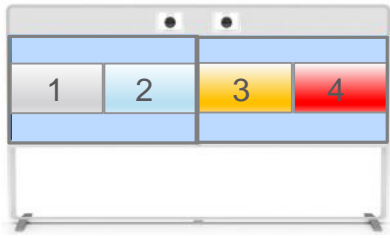
CE9.1.1 & CMS 2.2



- Receive video on both screens of dual screen endpoint, when not sharing content
- Require CE9.1.1 (available now)
- Disable by default in CMS 2.2
- CMS transcodes main video and overlays the PiPs
- Content & audio are transcoded
- iX protocol is not mandatory but is recommended

Dual Screen Feature Experience

Example: 5 Participants Equal Layout on Dual Screen Endpoint



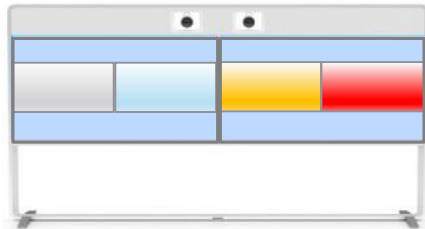
5 participants no content



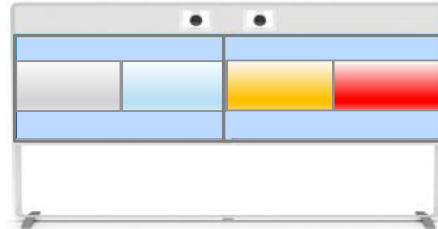
5 participants with content



Content Monitor



Dedicated Content Display
5 participants no content



Dedicated Content Display
5 participants with content



Maximum Quality Level Settings

- Set max resolution for increased capacity
- Main video and Content resolutions
- API object **/callLegProfile**

Parameter	Value
qualityMain	unrestricted (default) max1080p30 max720p30 max480p30
qualityPresentation	unrestricted (default) max1080p30 max720p5

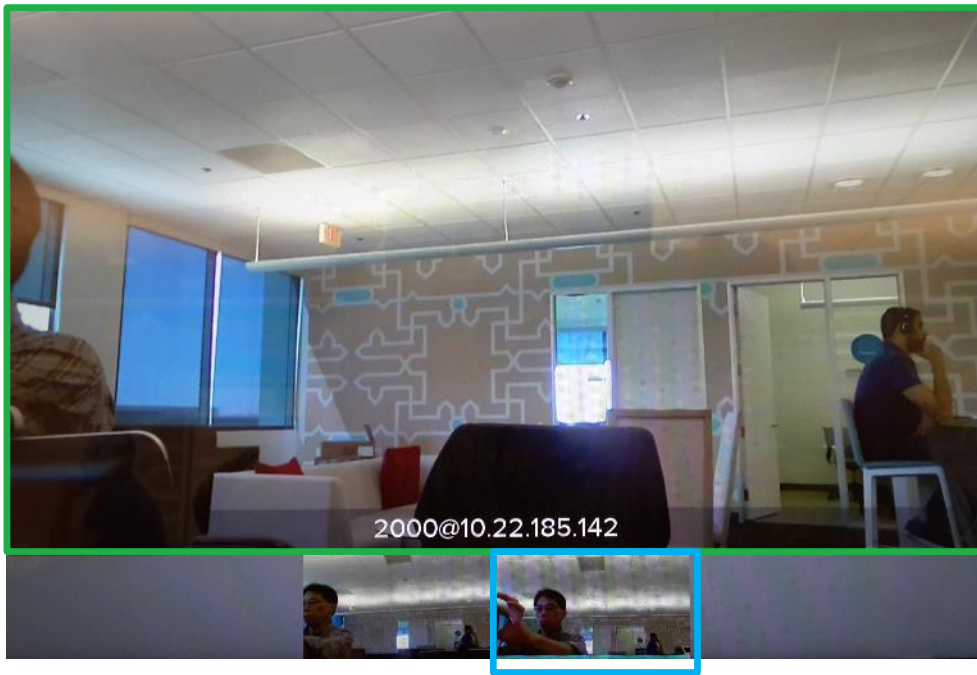
Important Participant Pane Placement

Better Cisco Collaboration Experience



- Keep your focus on the important person on the meeting
- Perfect for lectures, all-hands, and other meetings where it's important to keep focus on one speaker
- Important speaker appears as Active Speaker based on layout selected
- Only available through API for now

Importance Level for Participants



- Assign importance level to one or more participants
- Set **importance** parameter on API object **calls/<call id>/participants** (via configuration in the future release)
- Display the participant with highest important level in the **main screen**
- If more than one participants have the same level, the one who was the most recent active speaker will be chosen
- **Active speaker** is indicated by the **blue line**

Chapter Censored...

CMS moving forward

Chapter Censored...

New Service with “CMS”

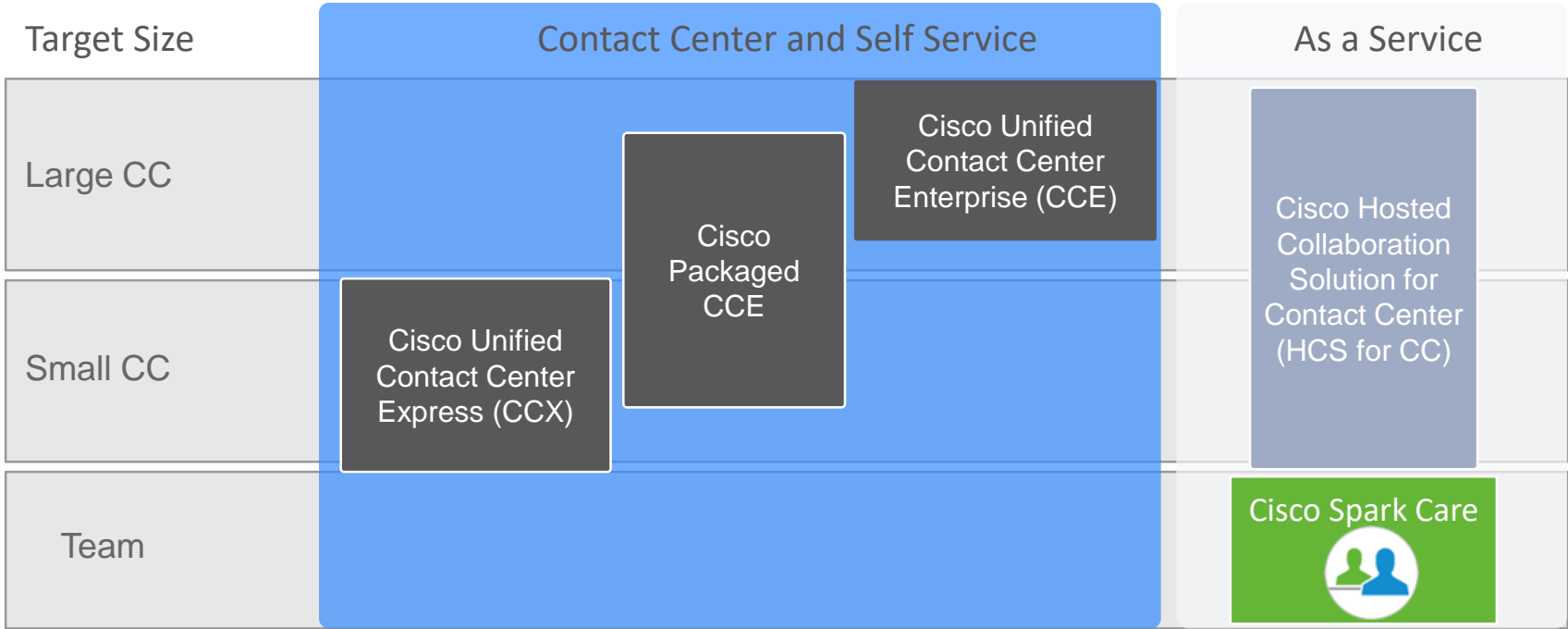
Cisco Xxxxxxx Xxxxxxx

Chapter Censored...

Roadmap

Contact Center Express 11.6

Customer Care Portfolio



SSO Support 11.6

- Single Sign-on for Agent and Supervisor interfaces
- Solutions: CCX, P/CCE, HCS
- Hybrid option for UCCE
- Components:
 - Finesse, CUIC, MediaSense, Transaction API, ECE, CCMP
- IdP: ADFS, OpenAM, Ping Identity, Shibboleth

- 11.6 Exclusions:
 - Finesse APIs
 - Finesse IP Phone Agents cannot be SSO enabled
 - CTIOS

- ✓ PCCE
- ✓ CCE
- ✓ HCS
- ✓ CCX

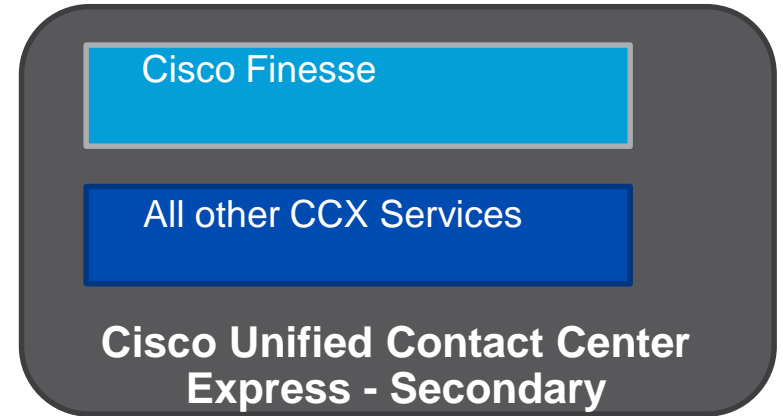
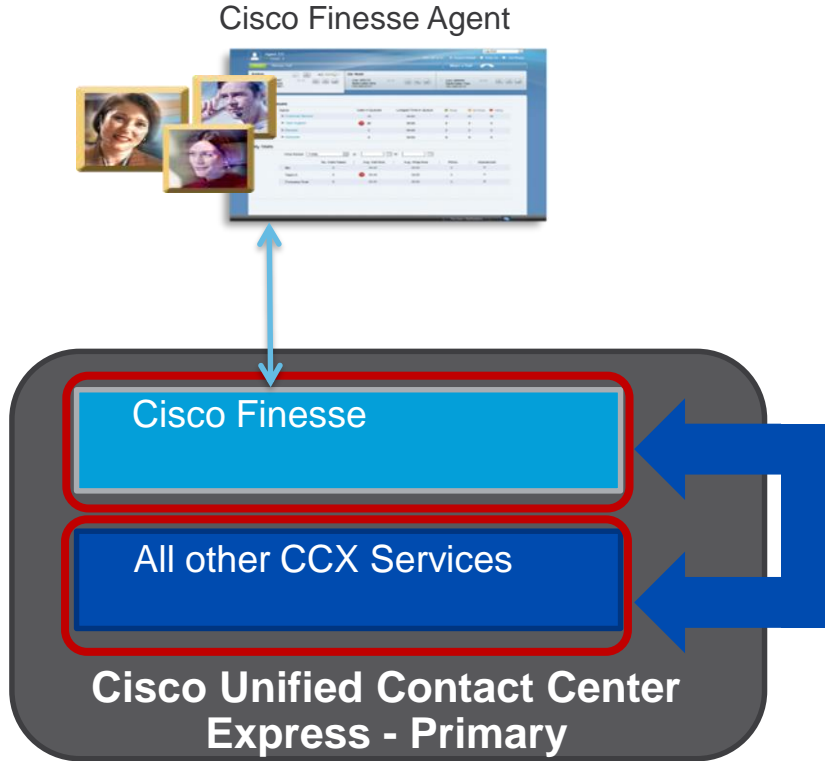


Core CCX Improvements

- Finesse Active-Active
- SocialMiner on BE6000
- Proxy and Header support for REST API
- Automatic import of outbound contacts
- Ability to access NR reason codes from script

CCX High Availability

Finesse Active-Active



CCX High Availability

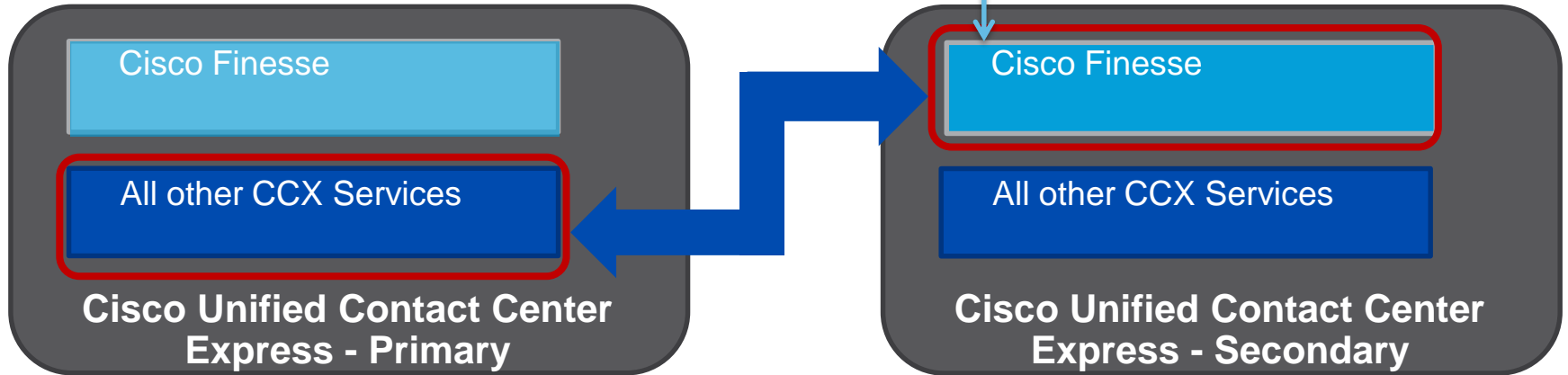
Finesse Active-Active



Cisco Finesse Agent



No requirement to re-login after Finesse failover



CUIC UX Refresh: Simplified Chart Creation

- ✓ PCCE
- ✓ CCE
- ✓ HCS
- ✓ CCX

The screenshot displays the Cisco Unified Intelligence Center (CUIC) interface. At the top, the title bar reads "Unified Intelligence Center" and includes navigation links for "License Usage" and "Service Setup", along with the user profile "Sandra Jefferson Administrator". Below the title bar, there are tabs for "Reports", "Agent Re...", "Report 3", "Report L...", and "New Rep...".

The main content area is divided into two sections. On the left is a sidebar with navigation options: "Dashboard", "Reports", "Users", and "Configure". The main area on the right is titled "Create New Chart View" and contains five selectable chart types, each with an icon and a label:

- Bar Chart
- Column Chart
- Line Graph
- Gauge
- Pie Chart (highlighted in orange)

A "Cancel" button is located at the bottom left of the "Create New Chart View" dialog.

CUIC UX Refresh: Dashboard

- ✓ PCCE
- ✓ CCE
- ✓ HCS
- ✓ CCX

Unified Intelligence Center

Maria Quinteros Administrator

My Dashboard

Agent Live Performance

Calls Handled %

Sales Index

Stock prices

Symbol	Last	Change	(%)
AAPL	99.62	-0.28	(-0.28%)

Recent tweets

- Today's live chat Extra has finally been released, and you are going to love all of the great features we have been working on all the time.
12 mins ago · Reply · Retweet · Favorite
- Find all of the best WordPress themes in one place. If you sign up now you can get a free 40% discount on all of our 2015 WordPress themes.
1 hour ago · Reply · Retweet · Favorite
- Looking for a new podcast? Check out the entire first season of our Actionable Marketing podcast.
7 mins ago · Reply · Retweet · Favorite

Call Distribution by Products

Agent Details

Agent Name	Call Time	Calls Handled	Agent State
Oiga Cummings	02:08:50	71	Ready
Mayne Lamb	01:01:03	53	Ready
Ina Gibbs	01:09:54	97	Ready
Bruce Carson	01:05:52	21	Ready
Mina Abbott	02:08:38	54	Ready
Nannie Neal	02:11:57	13	Not Ready
Marcus Munoz	02:09:20	43	Ready
Edna Jackson	01:07:48	48	Ready

Finesse Recent Call & State History Agent Desktop

- ✓ PCCE
- ✓ CCE
- ✓ HCS
- ✓ CCX

Agent Sandra Jefferson (1001009) - Extension 1001009
Cisco Not Ready 21:13 Sign Out

Home My History My Statistics Manage Customer Manage Chat & Email

Make a New Call

Recent Call History

Type	Number	Disposition	Wrap-Up Reason	Queue	Start Time	Duration	Make Call
Inbound	+13780049003	Handled	SalesPromo	Warranty	Mar 12 2015 9:36 AM	00:07:30	
Inbound	+97224453990	Handled Other	Onb_Erd12	New Subscription	Mar 12 2015 9:36 AM	13:09:12	
Outbound	Unknown	Incomplete			Mar 12 2015 9:36 AM	00:00:03	
Outbound	+16880067124	Redirected	Onb_Erd12	New Subscription	Mar 12 2015 9:36 AM	00:00:32	
Outbound	1001075	Abandoned			Mar 12 2015 9:36 AM	00:00:05	
Inbound	1001098	Rerouted			Mar 12 2015 9:36 AM	00:04:05	
Inbound	100108	Error			Mar 12 2015 9:36 AM	00:00:04	
Outbound	1001065	Abandoned			Mar 12 2015 9:36 AM	00:00:01	

Recent State History

Start Time	State	Reason	Duration
Mar 12 2015 10:45 AM	Reserved		00:00:00
Mar 12 2015 10:23 AM	Ready		13:09:12
Mar 12 2015 10:02 AM	Not Ready	Break	00:00:03
Mar 12 2015 9:52 AM	Logged Out	Device Error	12:19:00
Mar 12 2015 9:23 AM	Logged Out		00:03:01

2010-2017 Cisco Systems, Inc. All rights reserved. Cisco Finesse Administrator v11.6 Send Error Report

Finesse Recent Call & State History Supervisor Desktop

- ✓ PCE
- ✓ CCE
- ✓ HCS
- ✓ CCX

Supervisor - Rick (10021009) Sign Out ▾

Not Ready 21:13

Manage Team | Team Data | Queue Data | Manage Customer | Manage Chat & Email | Manage Recording | My Statistics

Make a New Call

Team Performance

Voice_Insurance 1 Include Logged Out Agents

Start Monitoring ● Ready ● Not Ready Sign Out

Agent Name	State	Extension	Duration
Sandra Jefferson	● Talking	1001001	21:13:00
John Doe	● Talking	1001001	21:13:00
Josh Peterson	● Talking	1001002	00:24:18
Sandy McLauren	● Logged Out		
Kanye West	● Logged Out		
John Pitt	● Logged Out		
Kate Winslet	● Logged Out		
Bradley Cooper	● Logged Out		
Mathew Hoffmen	● Logged Out		

Recent Call History - Sandra Jefferson

Start Time	Duration	Type	Number	Disposition	Queue	Wrap-Up Reason
Mar 12 2015 9:36 AM	00:07:30	Inbound	+13780049003	Handled	Warranty	SalesPromo
Mar 12 2015 9:36 AM	13:09:12	Inbound	+97224453990	Handled Oth...	New Su...	Onb_Erd12
Mar 12 2015 9:36 AM	00:00:03	Outbound	Unknown	Incomplete		
Mar 12 2015 9:36 AM	00:00:32	Outbound	+16880067124	Redirected	New Su...	Onb_Erd12
Mar 12 2015 9:36 AM	00:00:05	Outbound	1001075	Abandoned		
Mar 12 2015 9:36 AM	00:04:05	Inbound	1001098	Rerouted		
Mar 12 2015 9:36 AM	00:00:04	Inbound	100108	Error		
Mar 12 2015 9:36 AM	00:00:01	Outbound	1001065	Abandoned		

Recent State History - Sandra Jefferson

Start Time	State	Reason	Duration
Mar 12 2015 10:45 AM	● Reserved		00:00:02
Mar 12 2015 10:23 AM	● Ready		00:00:04
Mar 12 2015 10:02 AM	● Not Ready	Break	00:12:03
Mar 12 2015 9:52 AM	● Logged Out	Device Error	12:19:00
Mar 12 2015 9:23 AM	● Logged Out		00:03:01

CCX Email/Chat Improvements



- Signature
- CC, BCC, Reply All
- Forward
- Editable To Field
- Email Wrap-up



- Typing indicator
- Group Chat
- Chat Wrap-up

CCX Supervisor Enhancements



• Monitoring



- Monitor Manual outbound calls on ACD line
- Team Performance Gadget enhancement
 - View only logged-in agents

• Reporting



- Reason Code labels
- Agent call and state history gadget
- Supervisor Level Reporting
- Omnichannel Reporting (historical)

Support for PCI HIPAA Compliance

Transport Layer Security (TLS) 2.0



- Needed for PCS-DSS 1.2 compliance by 30-Jun-2018
- Two parts:
 - Addition of TLS 1.2 support
 - Removal of TLS 1.0 (and SSL) support (no longer considered “strong”)
- Remediates POODLE and HeartBleed Exploits
- TLS 1.1 and 1.2 are allowed by PCI
- ⚠️ • In CCE, TLS 1.0 removal may impact 3rd-party DB access (update driver)
- 📘 • <https://blog.pcisecuritystandards.org/migrating-from-ssl-and-early-tls>



Context Service

- 460 Organizations registered for Context Service in production
 - Spark Care / CCX / CCE
- More than 62.3 million document entries to date
 - 56 Million Activities (PODs)
 - 5.5 Million Customer records
 - 1.0 Million Requests





Cisco Customer
Care Solutions



Business Frontend
Customer Interface



Business Backend
Applications

Out-of-the-Box Use Cases



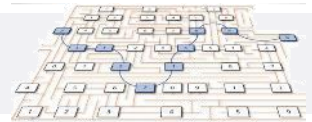
View Customer's Omnichannel interaction history

Route to the Last or Preferred Agent



Prioritize Abandoned / Repeat Contacts

Eliminate the IVR Maze



Personalized Experience (Preferred Language, Customer Tier)



SDK Integration Use Cases



Mobile App or Website journey mapping

CRM / Business App integration



Proactive / Follow-up Outbound Campaigns

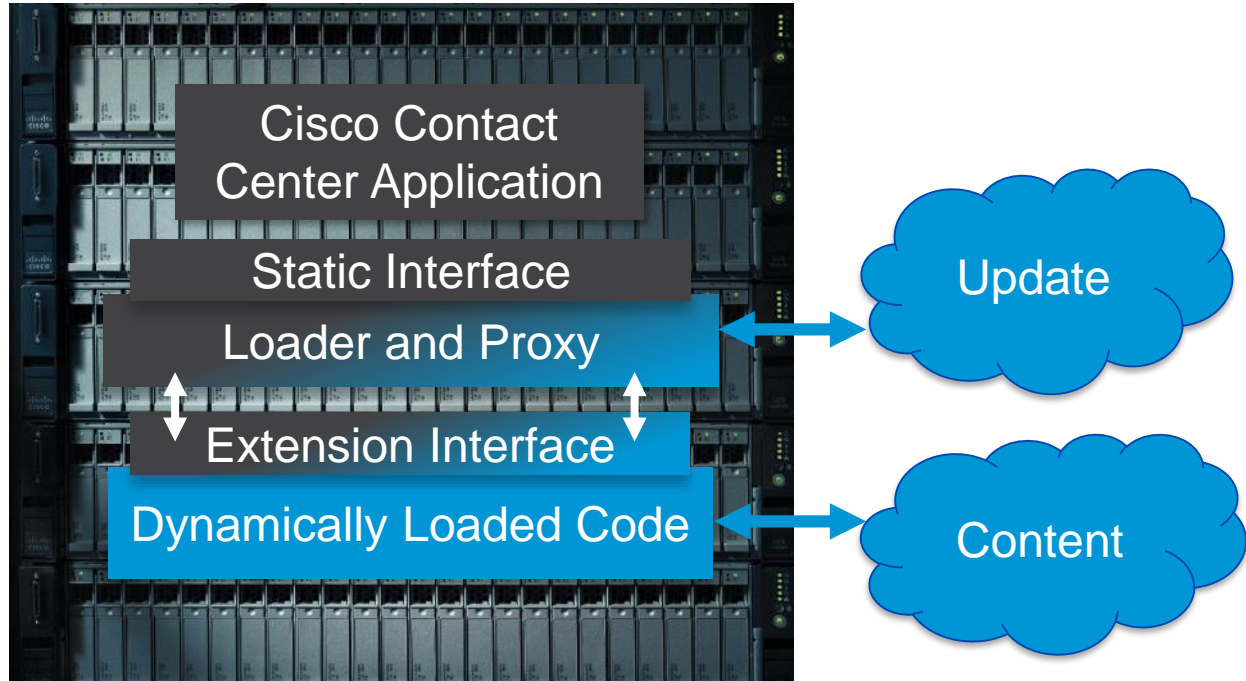
Geolocation and local agent routing



Use Context Data to find Trends / Patterns



No-Downtime Architecture

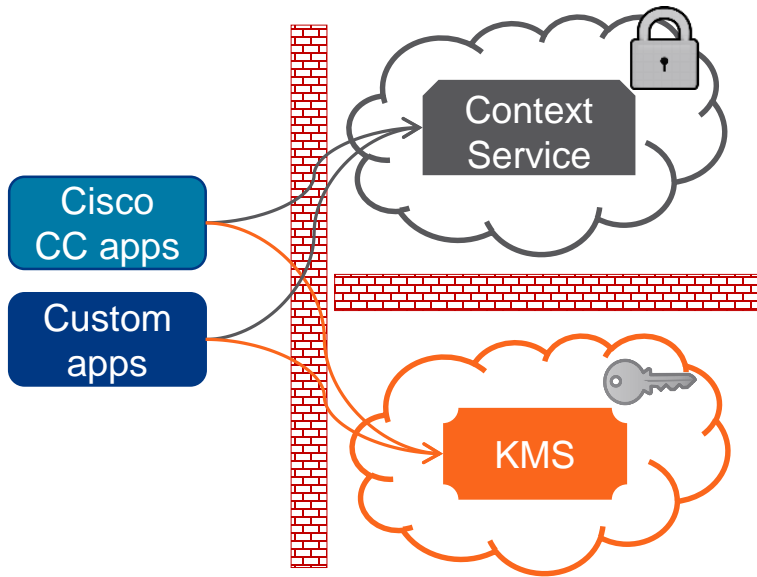


Hybrid Cloud On-Premises
Deployments

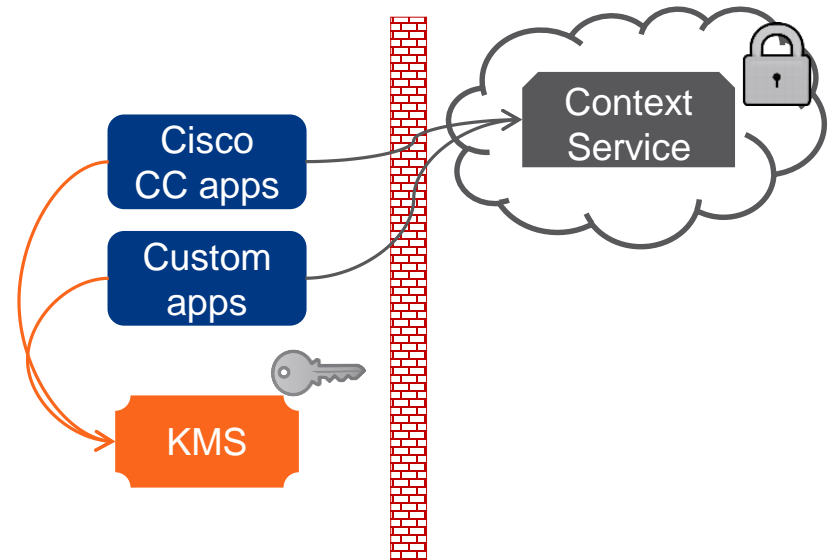
Check and download new version dynamically
Keep old code running for existing interactions
Load new code to run new interactions

Lockdown Security

Keys hosted on separate Cisco Data Centers



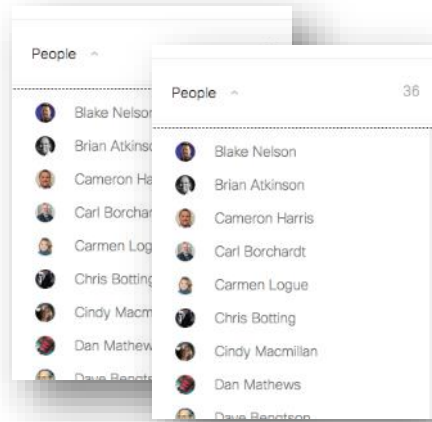
Future: Keys can be hosted on business premise



Care Assistant



Need Help



Teams of Experts in
Spark Spaces

Team Care

Create your own bot
Expert Assistance
Self administered Spark feature

Spark Care Portfolio – Chat & Callback



Welcome to Spark Customer Care

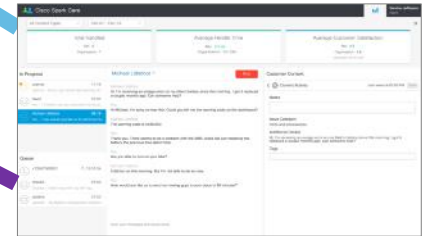
First Name
Michael Littlefoot

Email ID
michael@littlefoot.com

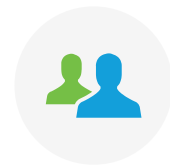
How may I assist you? (Required)
Documentation

Additional Details (Optional)
Need information about [bluefoot] set up

Start Chat



Cisco Spark Care

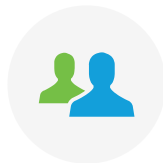


- Care BY small teams, help desks,
 - Targeted for up to 20 “agents”
- Care FOR external and internal customers
- Best for businesses and organizations with Cisco Spark™
- Reaches markets not well addressed by existing CC offerings
- May complement a formal contact center

Examples:

- Internal: Pricing experts supporting sales personnel
- External: Marketing team supporting a web promotion

Cisco Spark Care Overview



Common Management Experience

Cloud Collaboration Management

Overview

- Message**: New spaces this week: 0. Last week: 0.
- Meeting**: This month: 0. Last month: 0.
- Call**: This month: 0. Last month: 0.

Care: This month: 15. Last month: 26.

Room Devices: Meeting room devices seamlessly integrated with the Spark app. Contact your partner or Cisco Sales for more information.

Hybrid Services: Hybrid Services allows you to integrate your on-premises systems with the Cisco Collaboration Platform. [Learn More](#)

Licenses: You have 100 unassigned MESSAGING licenses. [Manage Users](#)

Optimized Agent Experience

Cisco Spark Care

Search: Jeffrey Agent

Total Handled: Me: 6, Organization: 7

Average Handle Time: Me: 1m 2s, Organization: 3m 28s

Average Customer Satisfaction: Me: 4.5, Organization: 4.5

In Progress

Michael Littlefoot (End)

James 11:18: Hi James - Sure, I got home last evening off...

David 10:07: Hi David, can you describe the issue?

Michael Littlefoot 09:19: Hi Michael, I'm sorry to hear this. Could you tell me the warning code on the dashboard?

Michael Littlefoot: The warning code is XAB0300

You: Thank you. There seems to be a problem with the BMS, looks like just replacing the battery the previous time didn't help.

You: Are you able to turn on your bike?

Queue

+13347568001 7:12:07:04: Hi, I'm receiving an outage error on my bike's battery since this morning. I got it replaced a couple months ago. Can someone help?

Charles 01:25: Hi Charles - Need help with my MFi key.

Jyotna 01:03: Hi Jyotna - My battery management system.

Type your message and press enter

Customer Context

Current Activity: Last saved at 02:03 PM

Notes

Issue Category: Parts and Accessories

Additional Details: Hi, I'm receiving an outage error on my bike's battery since this morning. I got it replaced a couple months ago. Can someone help?

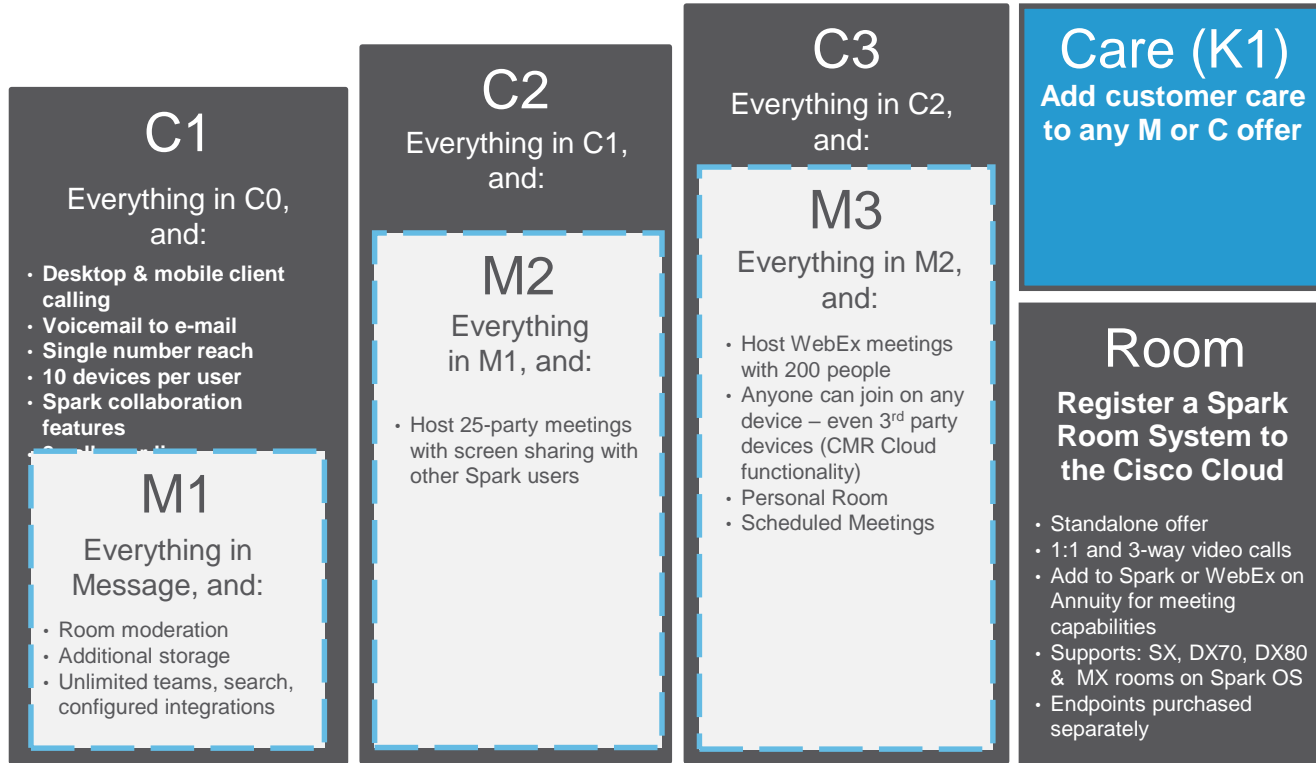
Tags

Digital Customer Care for Help Desks and Small Teams

- Web Chat
- Callback
- Customer Context
- Reporting
- Cloud Management
- 15 Minute Setup
- End-to-End Encryption
- Single sign-on



Spark Offer Structure



Add to M3/C3	Conference Audio <ul style="list-style-type: none">• Toll, Toll-Free• Callback	Centers <ul style="list-style-type: none">• Event• Training
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Spark Care K1 Available April 6 .. and we keep delivering

K1

- 15 Min setup
- Multi-session Chat
- Web Callback
- Cloud Collaboration Management
- Pick Routing
- Contact Center Reports
- Chat CSAT survey and reports
- Agent metrics dashboard
- Care Agent Desktop
- Chat Transcript Storage
- Embedded Customer Profiles
- Context Service
- Single Sign-On
- End-to-End Encryption

Spark Flex Plan

Cisco Spark Flex Plan

Cloud and Premises



Simplifying transitions:
Industry-leading,
on-premises to cloud

Subscription



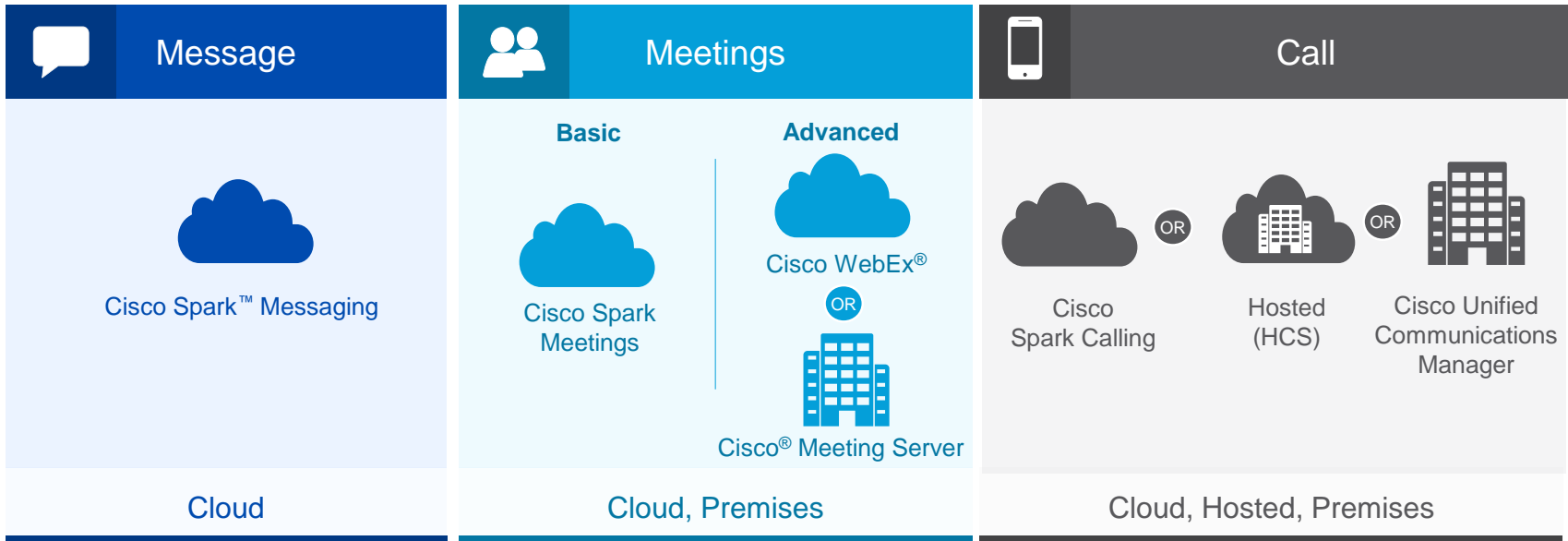
Easy OpEx purchasing

Flexible Options



Active User, Employee Count
or
Shared Meetings*

Cisco Spark Flex Plan: Ultimate Flexibility





stay on top

Worldwide
Sales Training

