



Polycom and Microsoft: *A Complete UC Experience*

Uwe Ansmann | Polycom System Engineer

Polycom + Microsoft's Winning Partnership

Polycom and Microsoft deliver end-to-end UC solutions that transform unified communications

Strategic Partner

Strategic alliance spanning more than a decade

Multi-year development, integration and go-to-market agreement with Microsoft

Expanded relationship with new Skype Room System products

The Polycom Difference

Broadest portfolio of voice and video solutions with native Skype for Business integration

Provide a seamless user experience between Skype for Business and traditional conference room solutions



+



Polycom + Microsoft = A Complete UC Experience



Exceptional Native Experiences

- #1 Skype for Business IP Phone Provider
- Best in Class Collaboration Solutions



Integration and Interoperability

- Extend your existing investments into the Skype Meeting Experience
- Leverage *RealConnect* with *Clariti*



Services to Support the UC Journey

- Experts that know UC who can help you succeed
- From Envisioning through Support

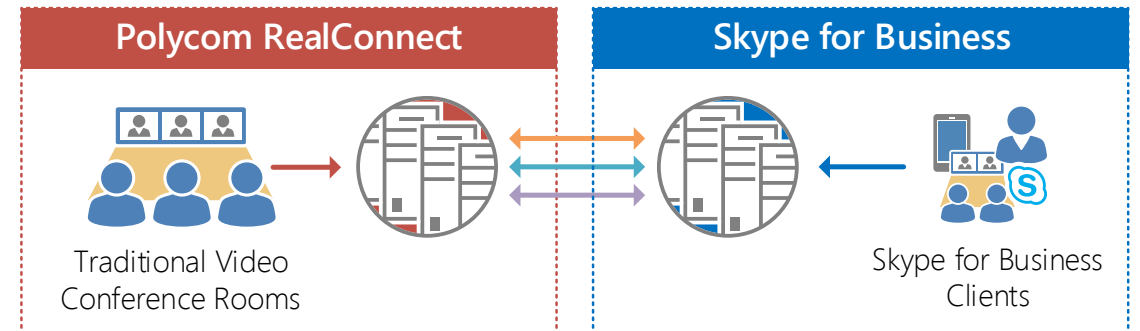
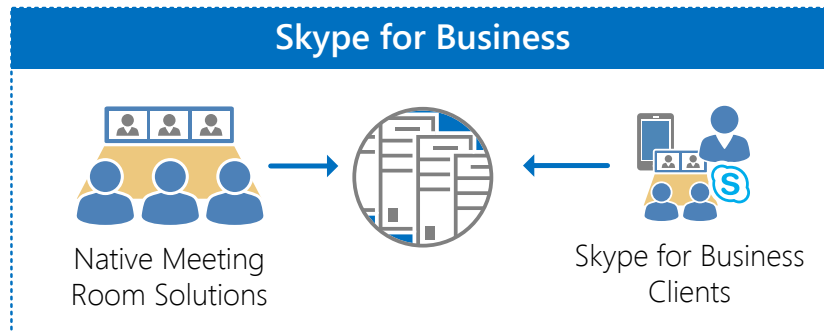
Which solutions are right for me?

Native Endpoints

- ✓ I do not have standards based protocol needs
- ✓ I want the highest quality native experience for my users

Interoperability

- ✓ I have existing standards based endpoints and I need to fully realize that investment
- ✓ I need to connect with business partners/external parties using standards based protocols



Leading Microsoft UC Partner

Providing a global ecosystem of design, sales, and support resources

Compatible client and server products passing Microsoft qualification requirements for *direct integration* and unparalleled quality of experience all without the use of any gateways

Nearly 50 different products in the *Skype for Business Solution Catalog*, more than any other partner



15

Cloud IP
Phones



20

IP
Phones



9

Personal
Peripherals



2

Meeting
Room
Accessories



8


Meeting
Room
Systems



4

Meeting
Infrastructure

Consistent User Interface

 Skype for Business

 Office 365



Updated Skype for Business user interface available today across the following products in the latest software releases.

- **RealPresence Touch**
with Group Series 6.0
- **VVX 500 & 600 Business Media Phones**
with UCS 5.5.1
- **RealPresence Trio 8800**
with UCS 5.4.4

Polycom MSR Series

 Skype for Business

 Office 365

 One-touch-join

 HD audio

 HD video

 Desktop sharing

 PowerPoint sharing



- Designed to bring a Skype Meeting experience to any meeting room with a display or projector
- Windows 10 based device for center-of-room touch control and Skype for Business online meetings
- Multiple packages providing different video camera and audio options

Polycom MSR Series

MSR200

Small/Huddle Rooms



MSR Dock with Surface Pro 4
USB Webcam
RealPresence Trio

MSR300

Midsized Rooms



MSR Dock with Surface Pro 4
USB 12x Zoom PTZ Camera
RealPresence Trio

MSR400

Center of Table



MSR Dock with Surface Pro 4
CX5100 Conference Station

Group Series

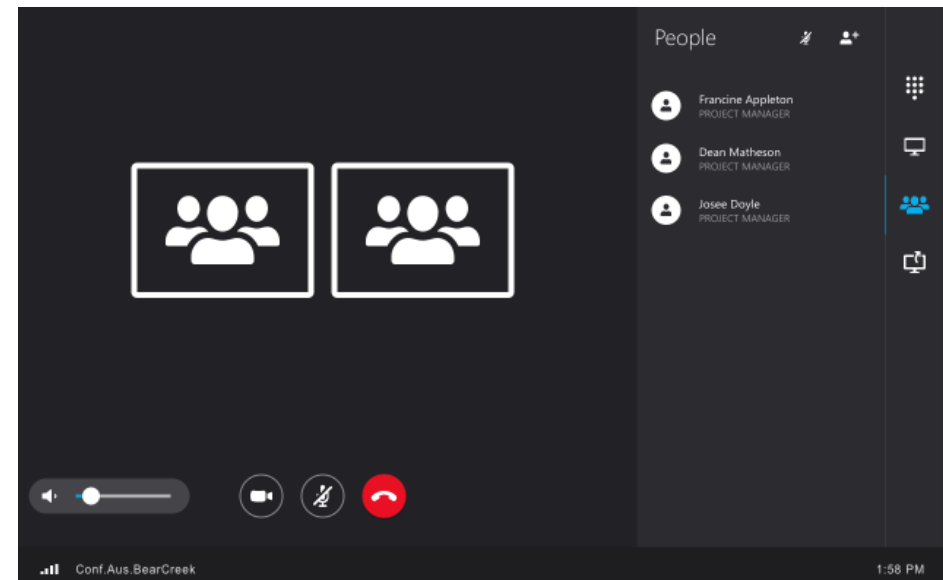
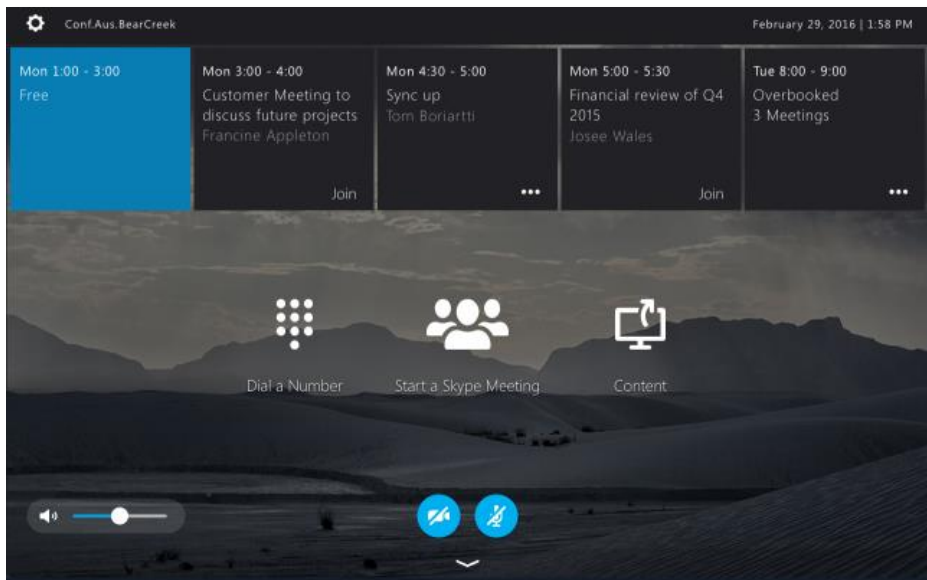


Skype for Business Qualification

- Currently qualified for on-premises Skype for Business Server environments
- Pending qualification for Skype for Business Online with *RealPresence Touch* control

RealPresence Touch

- Updated user interface with the same look and feel seen throughout Microsoft Skype for Business solutions



Endpoint Solutions - Personal Workspaces

What is happening in this space?

- Joining meetings from my desk and need to view or even present content to the meeting
- Presenters can look and sound their best when engaging with remote audiences
- Companion solutions to user's desktop or laptop workspace
- Outside noise is a problem because of shared workspaces



Group Series Convene

- Customizable system enclosed in an attractive package
- Designed for personal use
- Can be configured with *Acoustic Fence and Beam* technologies to filter outside noises



VVX Business Media Phones

- Largest family of Skype for Business Qualified IP Phones
- Includes *Acoustic Fence* technology to automatically block outside noise
- Can be paired with Skype client on PC for *Better Together* remote call control features

Endpoint Solutions - Huddle Spaces

What is happening in this space?

- Meetings with a team of local and remote participants in a smaller space
- Impromptu rich collaboration and staying connected without leaving remote people behind
- Content is important but might not be interactive on screen
- Efficient use of meeting room space is important



MSR Series

- Expand video collaboration to smaller workspaces at an affordable price with the next generation Skype Room Systems
- Multiple offerings paired with existing USB devices like the Trio or CX5100 to best match the needs of different rooms
- Enjoy full Skype for Business meeting fidelity with a familiar user interface

RealPresence Trio

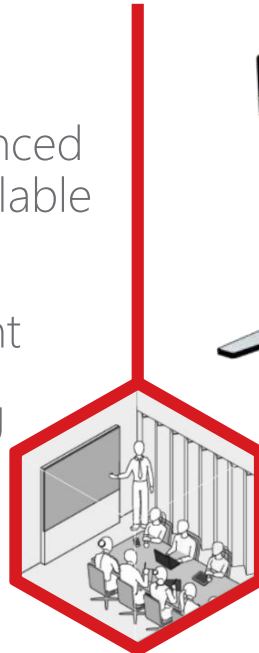
- The world's first smart hub for group collaboration
- Include the *RealPresence Visual+* package to add Video and Content Sharing experiences with a single monitor
- Simplified single touch meeting join experience



Endpoint Solutions – Traditional Rooms

What is happening in this space?

- Traditional presentation spaces but with advanced technologies needs like touch capabilities available on all interfaces
- Audio and Video quality is incredibly important
- Technology needed which just works, allowing all to interact confidently and naturally
- Meetings can include local participants, other rooms, and remote participants



RealPresence Medialign

- Simplify traditional meeting rooms installations with turn-key packages
- Powered by *Group Series* codecs providing the same camera and microphone options
- Utilize automatic camera tracking and room framing with *EagleEye* camera options like *Producer* and *Director*

RealPresence Group Series

- Flexible camera and microphone options let you pick the one that best matches the needs of each room
- Connect with *SoundStation* integrated audio for larger rooms or those with unique requirements



Endpoint Solutions - Emerging Spaces

What is happening in this space?

- Sharing of meeting content is very important
- Meetings with teams working locally and may include remote users and offices
- True collaboration and content manipulation is a requirement
- Often requires outside noise remediation



RealPresence Group Series

- Leverage Polycom technologies like *NoiseBlock*, *Acoustic Fence* and *Beam* to filter out unwanted noises
- Simplified single touch meeting join experience with touch monitors or *RealPresence Touch*



RealPresence Centro

- Every participant in the meeting has a voice
- Work comfortably with your teams with natural eye contact and flexibility to move around the room
- Pair with a touch content monitor for content annotation

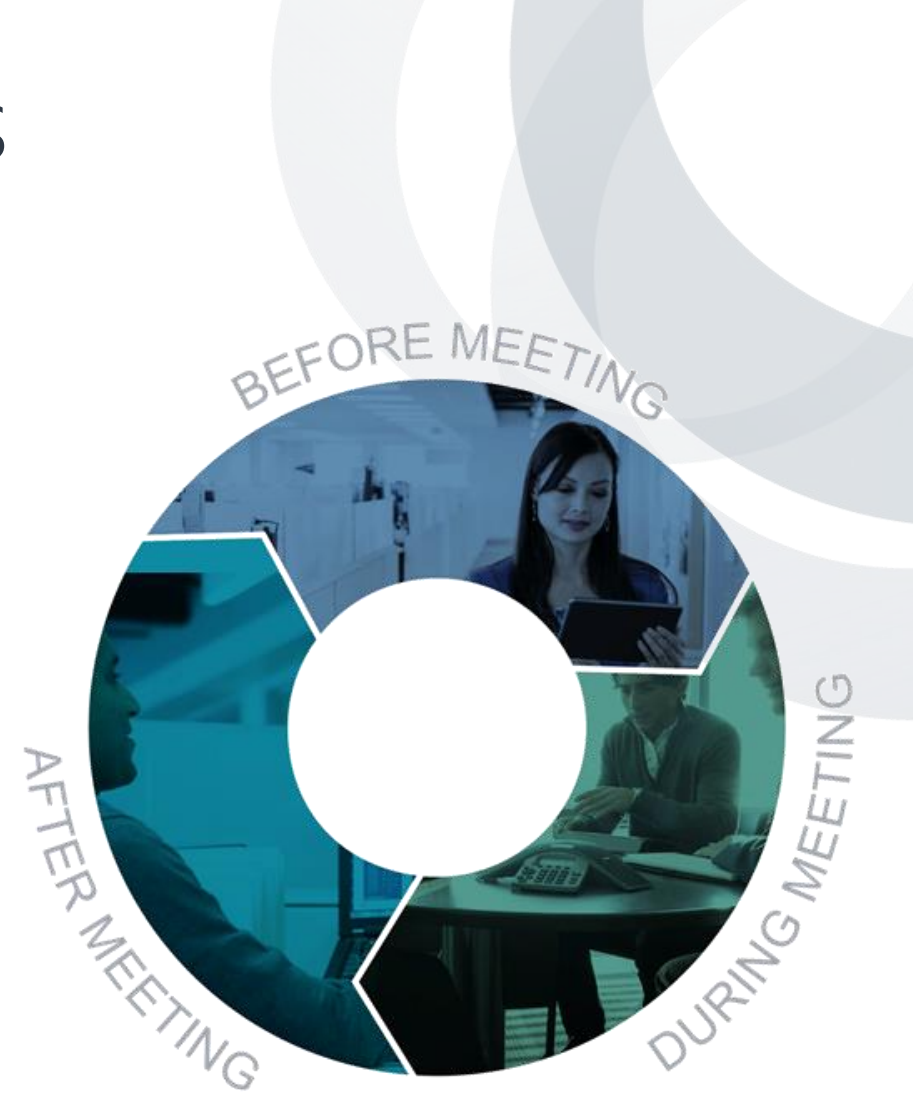
Typical Interoperability Challenges

The majority of Skype for Business meetings are scheduled

- Scheduling mechanisms often require additional software
- Participant endpoints are not always known up front
- Many room systems do not support native Outlook scheduling

Content is important, often more so than video

- Majority of existing solutions demand “meet on the bridge”
- May require deployment of client-side plug-ins
- Shared content not seen correctly or even by all participants



Polycom RealConnect

A unique approach pioneered by Polycom

Productivity Benefits

Outlook Scheduling - Easily schedule a conference call supporting any modality from multiple different platforms using a familiar calendar solution with no plugins

One Touch Dial - Connect to any Skype for Business meeting from a traditional video system without the need to remember any numbers or dial any auto-attendants

Choose Any Device - Join the conference call the way you like to collaborate with traditional conference rooms and Skype for Business participants providing voice, video, and content sharing

Operational Benefits

Increase adoption and usage through familiar scheduling process and intuitive user experience

Investment protection across both traditional room systems and Microsoft UC deployments



A Simplified Workflow

1. Invite via Outlook

Just create a new Skype Meeting

From: jeff.schertz@polycom.com

To: Schertz, Jeff; Jacobs, Adam; Mateo, Jose

Subject: Tuesday Engineering Meeting

Location: Skype Meeting

Start time: Tue 11/15/2016 11:00 AM

End time: Tue 11/15/2016 11:30 AM

[Join Skype Meeting](#)

This is an online meeting for Skype for Business, the professional meetings and communications app formerly known as Lync.

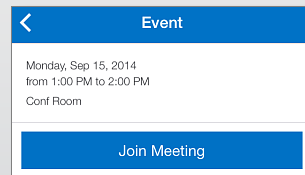
Join by phone
[+1 \(555\) 504-4984](#) (United States) English (United States)
[Find a local number](#)

Conference ID: 541383

For connection from standards based endpoints:
Internal users - Dial the Conference ID
External users - Dial the Conference ID@polycom.com

2. Join as you always do

Click to join from any Skype for Business client



[Join Skype Meeting](#)

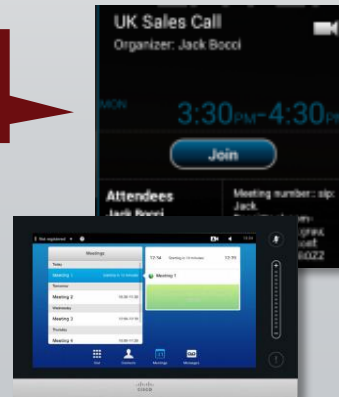
This is an online meeting for Skype for Business, the professional meetings and communications app formerly known as Lync.

Join by phone
[+14085557890](#) (North America) English (United States)
[Find a local number](#)

Conference ID: 173646
[Forgot your dial-in PIN? | Help](#)

One touch join from modern VTC

Dial into the meeting from any VTC



3. Collaborate with others

Gallery View & native content sharing in either direction



Continuous Presence video and standards-based content stream



A Consistent Experience

Polycom RealConnect

→ Audio
→ Video
→ Content

Standards-Based Video Endpoints

Skype for Business

→ Audio
→ Video
→ Content

Skype for Business Clients

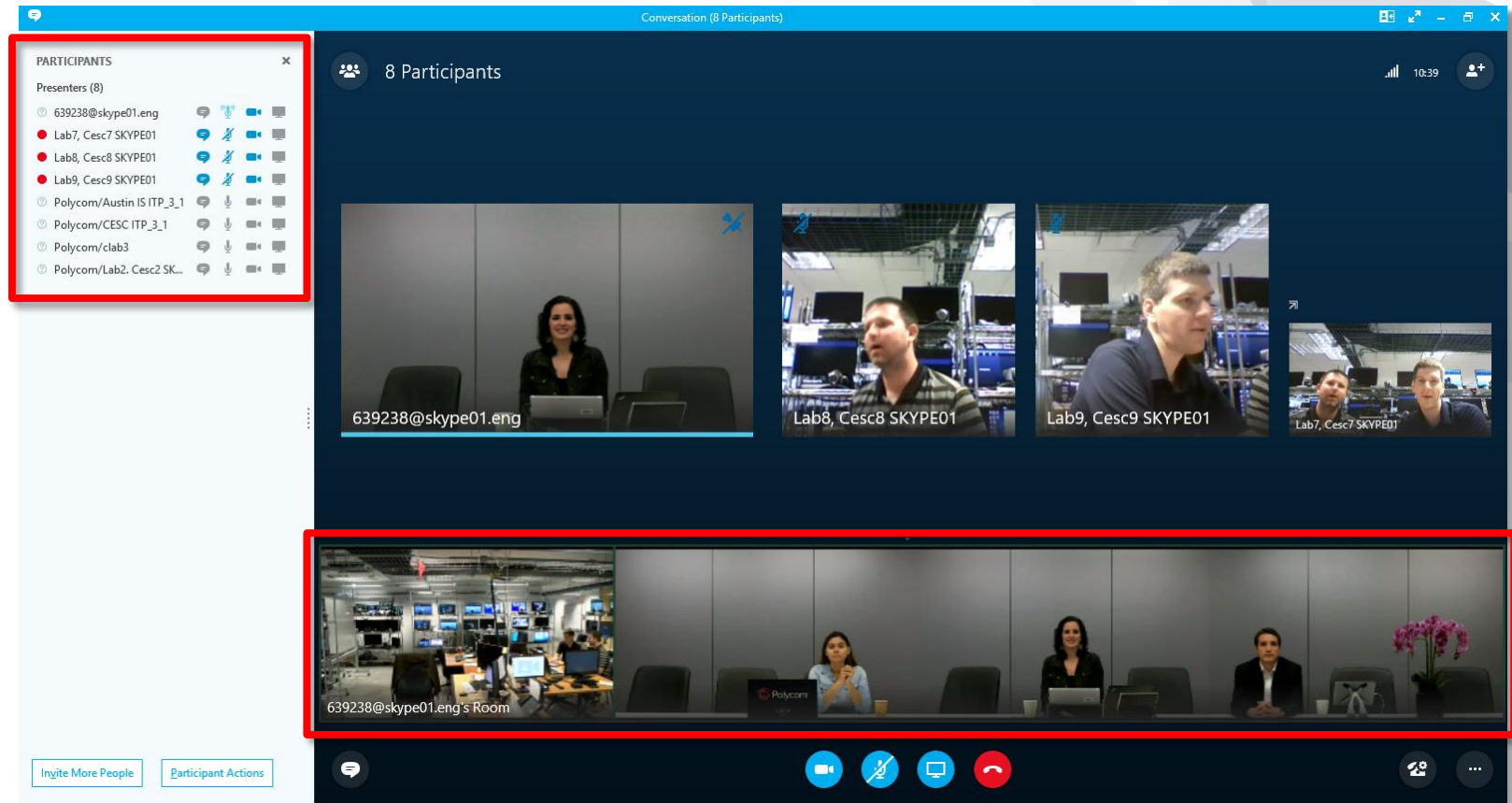
New Functionality

Participant List

- Individual entries for every standards-based endpoint joined via RealConnect
- Presenters can remove individual room systems from the meeting

Panorama Video


- Extend video real-estate by displaying up to four additional standards-based participant video streams
- This also includes the stitched video layout of various industry standard immersive telepresence rooms



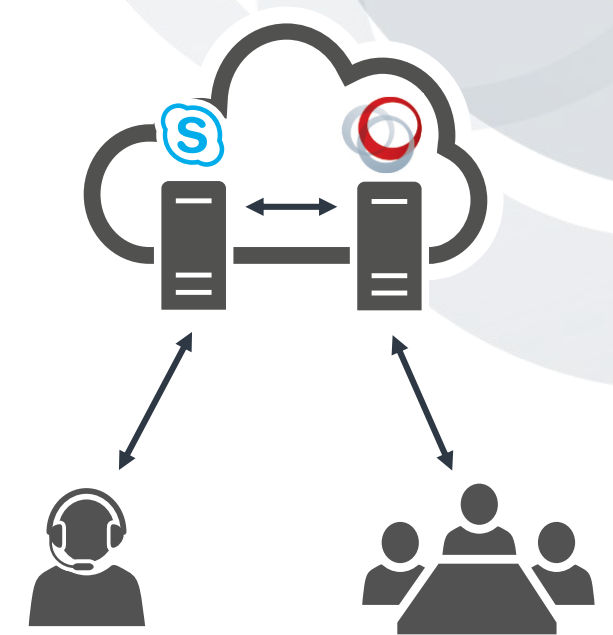
RealConnect for Office 365

Polycom RealConnect service hosted in Microsoft Azure

- Solution natively integrated into Office 365 services and applications, operated and supported by Polycom.
- Seamless scheduling and join experience for Skype for Business Online users.
- Supporting multiple traditional VTC dial-in mechanisms including One Touch Join, direct dial, and tenant-specific IVR.
- Handles bidirectional desktop content sharing by supporting both new VBSS and legacy RDP protocols.
- User-based licensing based to be sold via familiar Polycom channels.

 Skype for Business

 Office 365



**OFFICE 365
VIDEO INTEROPERABILITY**

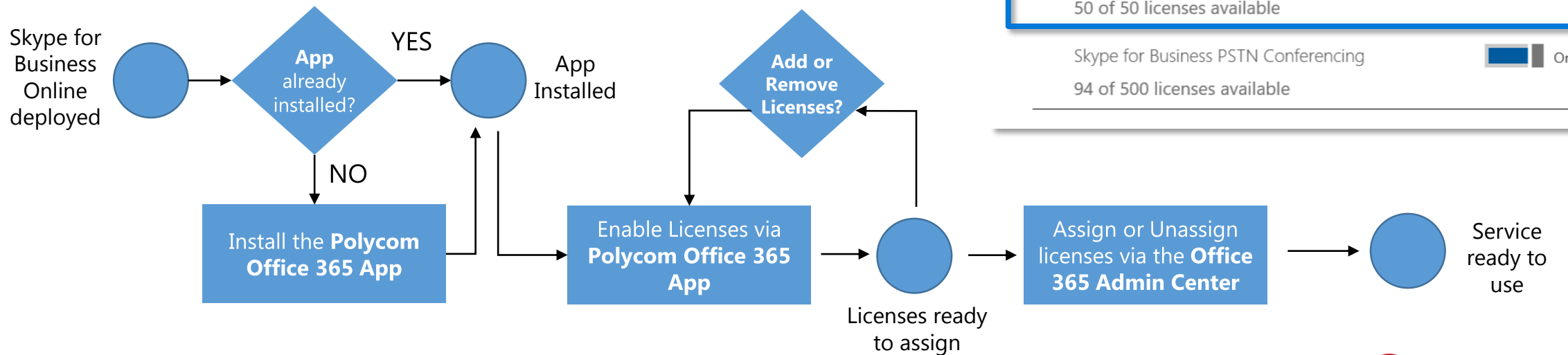
**POWERED BY
POLYCOM REALCONNECT**

Provisioning

Office 365 Marketplace App

App used to manually manage the lifecycle of the licenses:

- Search for and install Polycom app from Office Store
- Enter previously purchased product activation code
- Assign these annual licenses directly from the Office 365 Admin Center or via PowerShell



Product licenses

Location *

United States

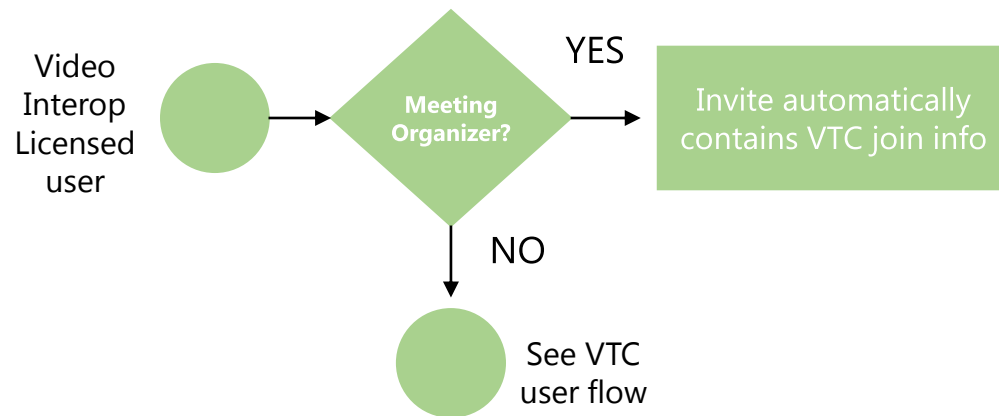
Office 365 Enterprise E5	Off
Office 365 Enterprise E3	On
69 of 500 licenses available	
Skype for Business Cloud PBX	On
138 of 500 licenses available	
Skype for Business PSTN Domestic Calling	On
Skype Meeting Video Interop for Skype for Business	On
50 of 50 licenses available	
Skype for Business PSTN Conferencing	On
94 of 500 licenses available	

Scheduling

Meeting Schedulers

Only Skype for Business users licensed for the RealConnect for Office 365 can host/schedule RealConnect meetings

- Licensed user with updated Skype for Business 2016 client schedules Online Meeting in Outlook
- Meeting invitation is sent out with additional details explaining how to join from a traditional VTC
- Invitation provides a unique VTC conference ID



[Join Skype Meeting](#)

Join by Phone

Toll number: [17075819677](tel:17075819677)

[Find local number](#)

Conference ID: 4182428 [Forgot your dial-in PIN?](#) | [Help](#)

Join with a video conferencing device

[sip:640450644@v.plcm.vc](tel:sip:640450644@v.plcm.vc) | VTC Conference ID: 017037800

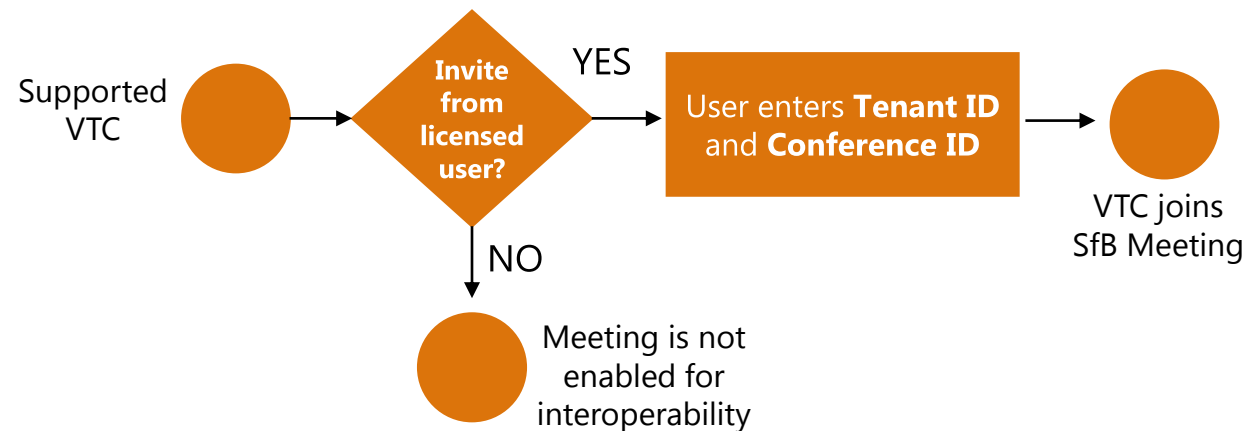
[Alternate VTC dialing instructions](#)

Joining

Participants

VTCs can only join the meeting if the invitation includes details on how to join

- Skype for Business and PSTN participants join no differently than before
- Calendar-enabled endpoints can leverage *One Touch Dial*
- Standards-based VTCs can join with provided SIP IVR dialing address or use the alternative dialing instructions for direct SIP or H.323 dialing



[Join Skype Meeting](#)

Join by Phone

Toll number: [17075819677](tel:17075819677)

[Find local number](#)

Conference ID: 4182428 [Forgot your dial-in PIN?](#) | [Help](#)

Join with a video conferencing device

<sip:640450644@v.plcm.vc> | VTC Conference ID: 017037800

[Alternate VTC dialing instructions](#)

Joining

One Touch Join

- Join meeting directly

Default Dialing

- Join meeting via SIP IVR

Alternate Dialing

- Join meeting directly
- Multi-vendor instructions
- SIP & H.323
- DNS and Numeric (IP)

Service Status

- Monitor RealConnect service availability status in realtime



Polycom RealConnect for Office 365

Welcome to the Public Preview for cloud video interop service. This page offers properly formatted dial strings which can be used when joining supported VTCs to the video interop service via H323 or SIP. If the dial strings listed below contain <ConfId> or <Key>, substitute the information from the meeting invitation or contact the meeting organizer.

Dialing instructions

Polycom Endpoints

Protocol	Dial String	Numeric Dial String
SIP	sip:640450644.017037800@v.plcm.vc	sip:640450644.017037800@13.65.43.19
H323	v.plcm.vc##640450644#017037800	13.65.43.19##640450644#017037800

Cisco Endpoints

Protocol	Dial String	Numeric Dial String
SIP	sip:640450644.017037800@v.plcm.vc	sip:640450644.017037800@13.65.43.19
H323	640450644*017037800@v.plcm.vc	640450644*017037800@13.65.43.19

Service Status

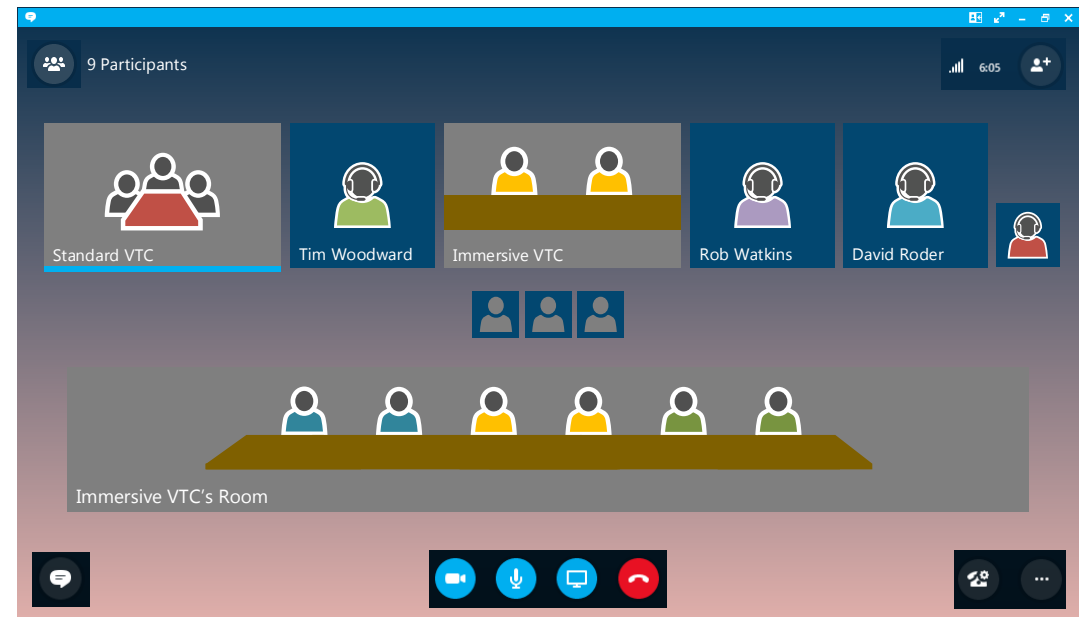
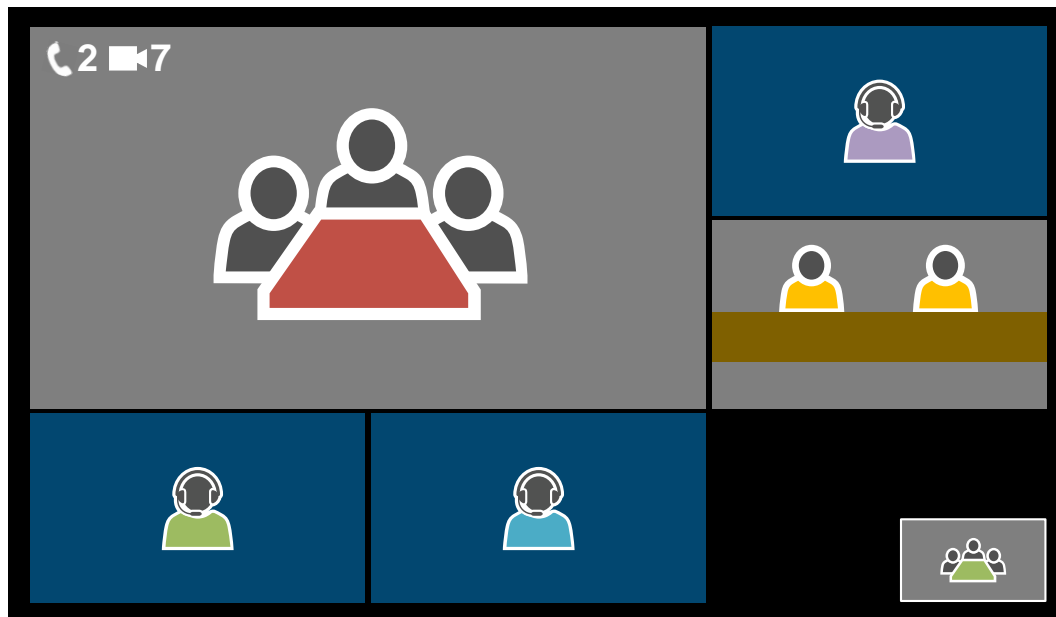
Protocol	Status
SIP TLS	✓
SIP TCP	✓
H.323	✓

<http://dialin.plcm.vc/dialin-instructions/index.html?key=999999&conf=123456789>

Experience

Video Layouts

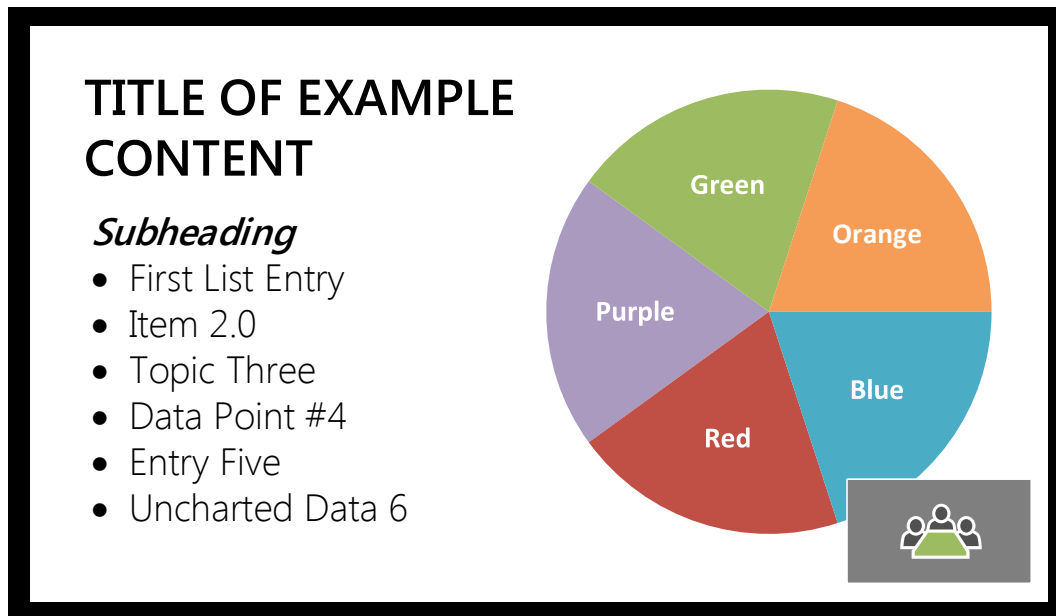
- Skype for Business Online MCU manages standard limit of 5 active video tiles which can display any combination of SfB or VTC participants
- Polycom RealConnect cascades every connected VTC into the same meeting with enhancements like providing panorama video streams for Immersive Telepresence rooms



Experience

Content Sharing


- Content transcoding over multiple codecs across both standards-based platforms and Skype for Business clients and devices
- Supports both *Video Based Screen Sharing (VBSS)* and *Remote Desktop Protocol (RDP)* along with *H.239* and *Binary Floor Control Protocol (BFCP)*



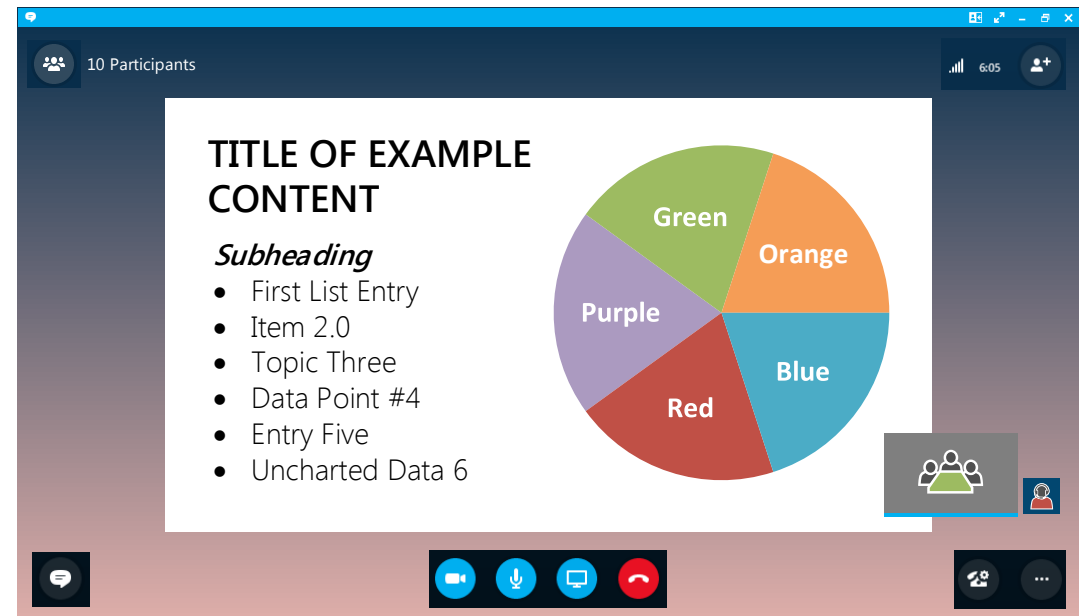
TITLE OF EXAMPLE CONTENT

Subheading

- First List Entry
- Item 2.0
- Topic Three
- Data Point #4
- Entry Five
- Uncharted Data 6



A pie chart divided into five segments: Green (top), Orange (top-right), Blue (right), Red (bottom), and Purple (left). A small icon of three people is in the bottom right corner of the slide.

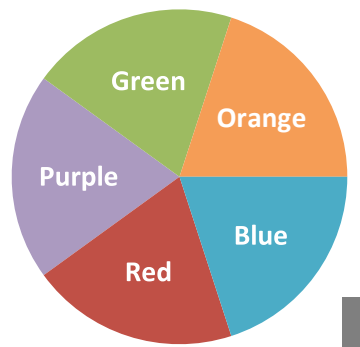


10 Participants 6:05

TITLE OF EXAMPLE CONTENT

Subheading

- First List Entry
- Item 2.0
- Topic Three
- Data Point #4
- Entry Five
- Uncharted Data 6

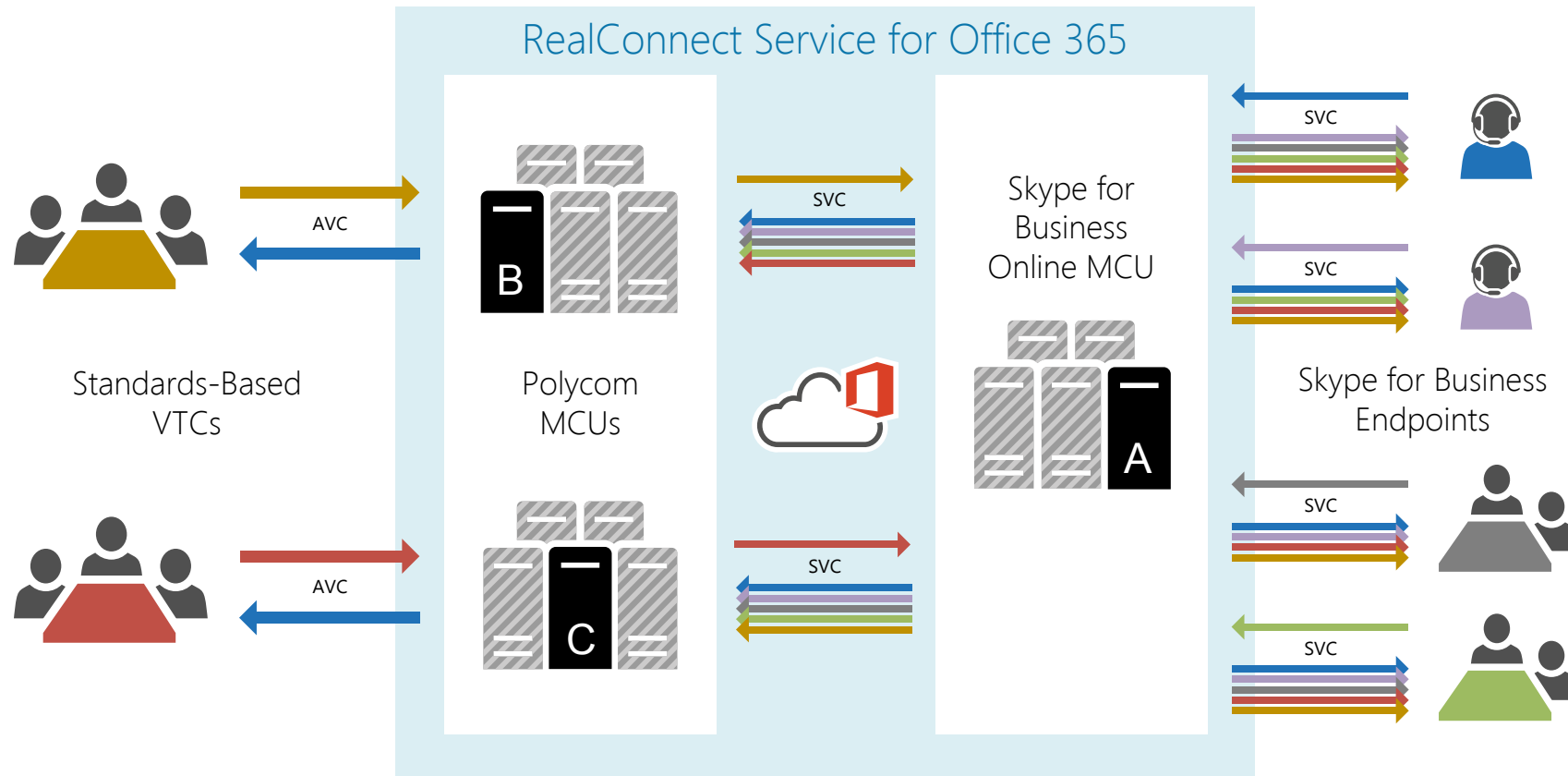


The same pie chart as in the previous slide, displayed within a video conference interface. The interface includes a top bar with '10 Participants' and '6:05', a bottom toolbar with icons for chat, video, audio, screen sharing, and call, and a small participant list icon on the right.

Experience

MCU Cascading

- Dedicated Polycom MCU allocated for every individual standards-based participant
- Multiple SVC video streams transcoded to and from single AVC streams



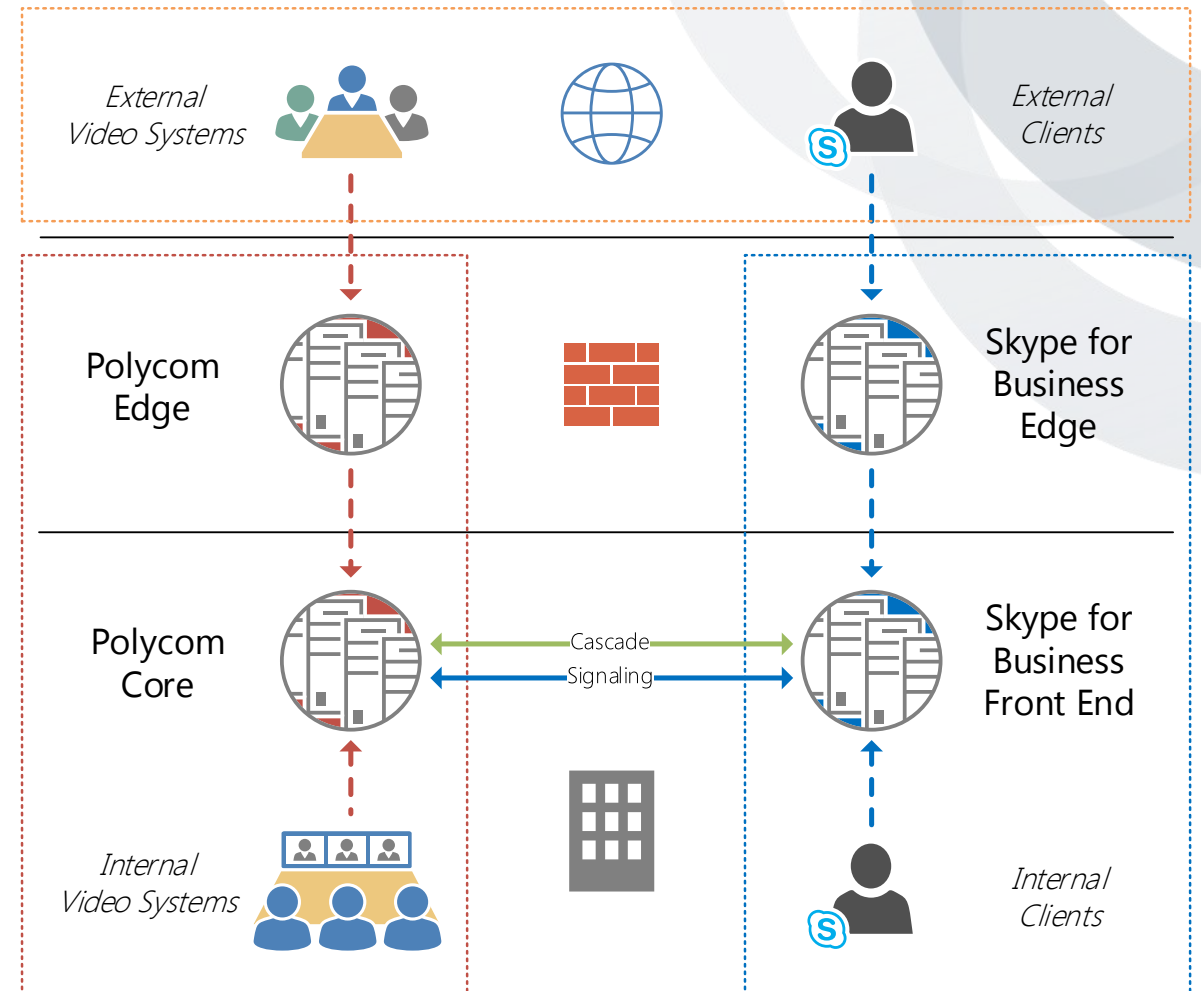
RealConnect with Skype for Business On-Premises

Environment

- *Skype for Business users homed on-premises only.*
- Polycom RealPresence platform deployed on-premises with Clariti licensing.
- Microsoft Lync or Skype for Business Front-End and Edge servers deployed on-premises.
- Trusted Application integration between Polycom core and on-premises Lync/SfB Front End server.

Behavior

- Signaling communications and media session cascade established directly between on-premises Polycom core infrastructure and Skype for Business Front End pools.



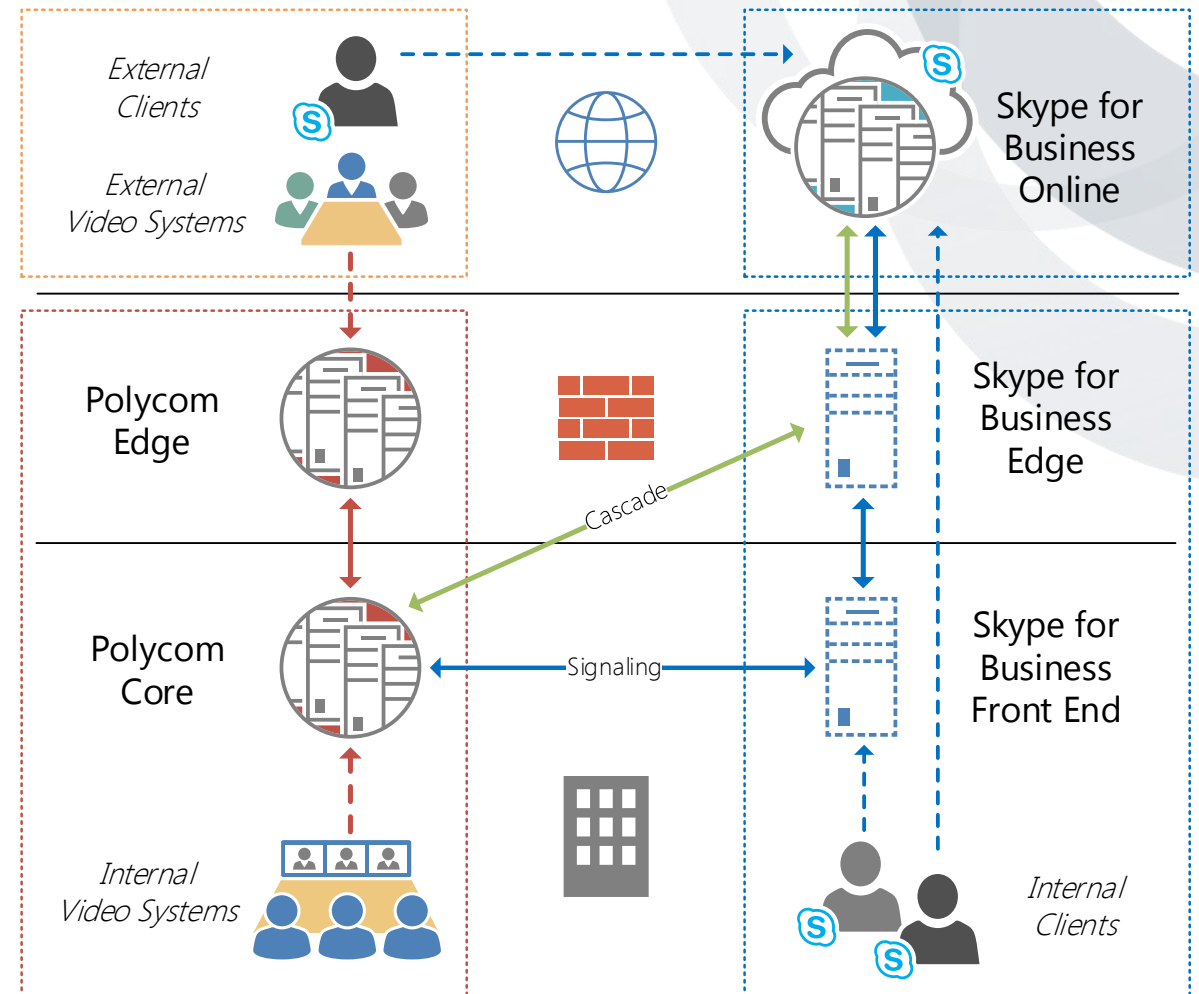
RealConnect with Skype for Business Hybrid

Environment

- *Skype for Business users homed in either/both on-premises or online pools.*
- Polycom RealPresence platform deployed on-premises with Clariti licensing.
- Microsoft Lync or Skype for Business Front-End and Edge servers deployed on-premises.
- Trusted Application integration between Polycom core and on-premises Lync/SfB Front End server.

Behavior

- Direct signaling communication between the Polycom core and Skype for Business on-premises pool for discovering both local conferences and Office 365 hosted conferences.
- Media sessions will cascade to either the on-premises or Office 365 Skype for Business MCUs, relayed through the Edge Server if necessary.



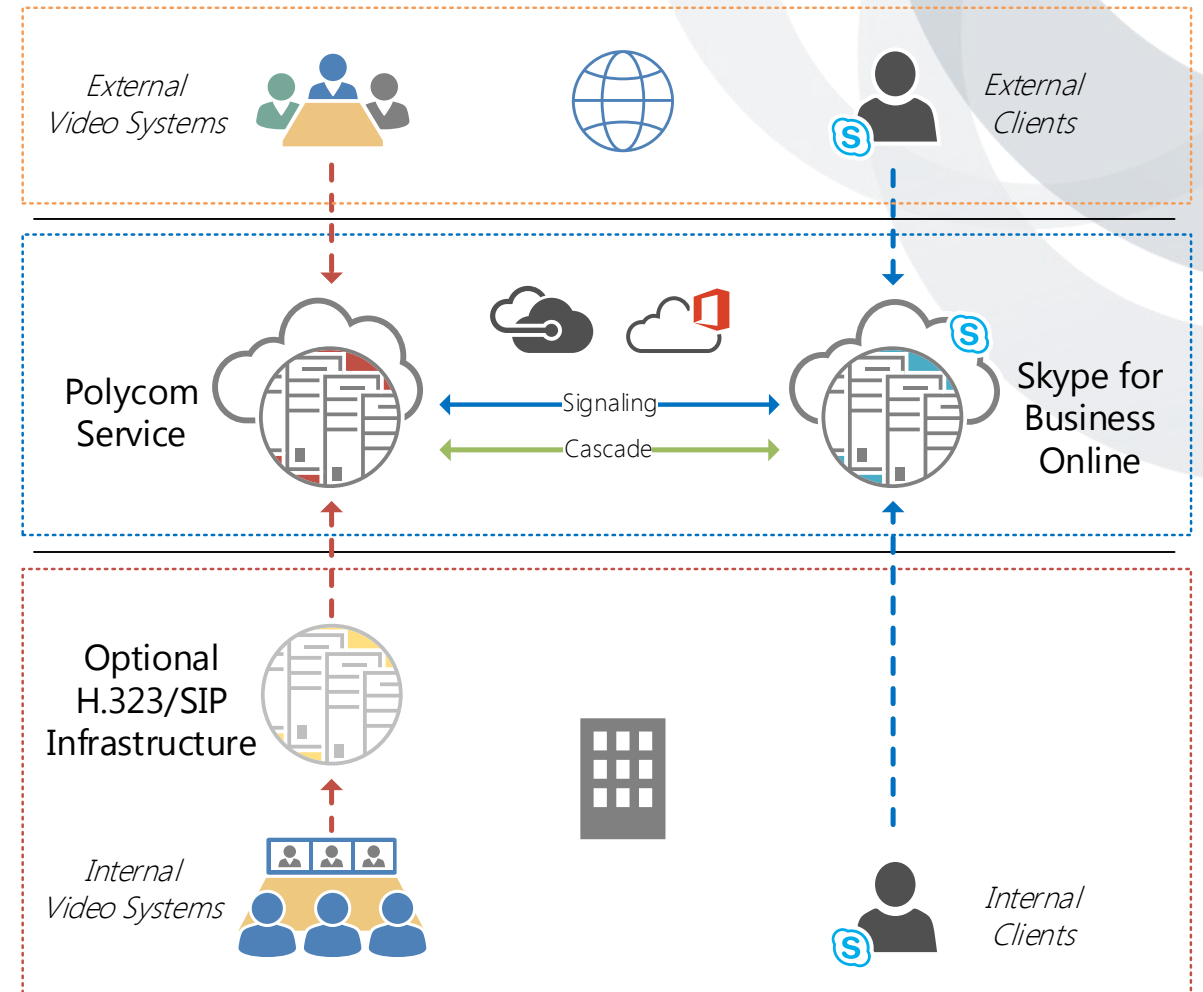
RealConnect for Office 365

Environment

- *Skype for Business users homed online only.*
- Polycom service hosted in Microsoft Azure cloud.
- Endpoints and clients located on customer premises and/or Internet.
- Supports unregistered endpoint calls to Polycom service
- Optional H.323/SIP video infrastructure components can be utilized to provide local endpoint registration and management, call routing, or firewall media traversal assistance.

Behavior

- RealConnect communicates with Skype for Business Online and cascades media sessions transparently within the Microsoft Office 365 datacenters.



RealConnect Infrastructure Components

One Touch Dial

- Functionality provided by a software application, or with *Resource Manager*, or natively in Group Series endpoints
- Supports several different Polycom and Cisco room systems

Distributed Media Application

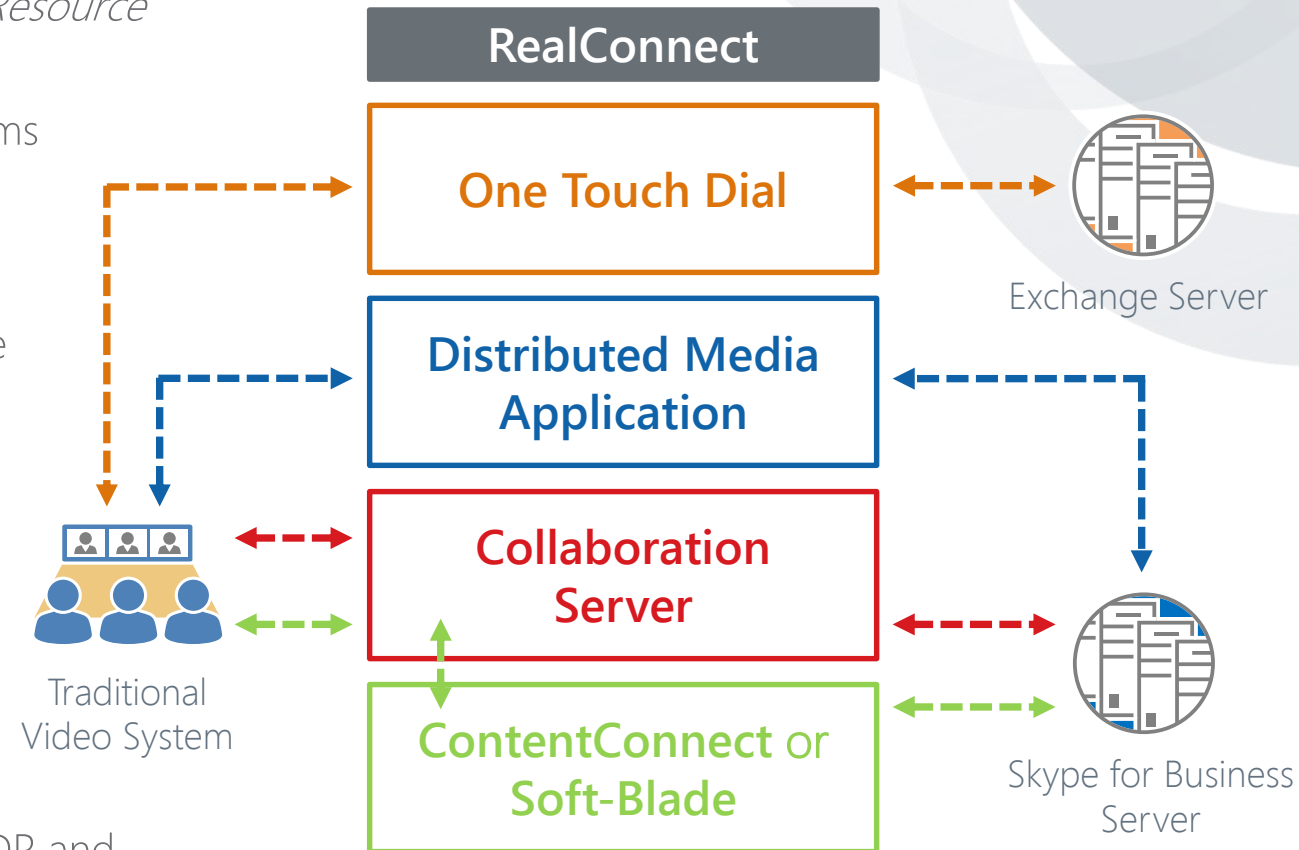
- Establishes a secure signaling connection between both environments providing the cascaded meeting experience

Collaboration Server

- Transcodes video and audio streams between various standards-based codecs and Microsoft codecs
- Handles multiple participant video streams to support various codecs, resolutions and frame rates

ContentConnect or Soft-Blade

- Transcodes shared content streams between Microsoft RDP and standards-based H.239/BFCP formats



Thank You

For more information on Polycom Solutions visit:

- www.polycom.com/microsoft
- support.polycom.com/microsoft

For specific questions please email: teammicrosoft@polycom.com



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A Complete UC Experience