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WAINHOUSE Research

# When Skype for Business Video Conferencing is Not Enough

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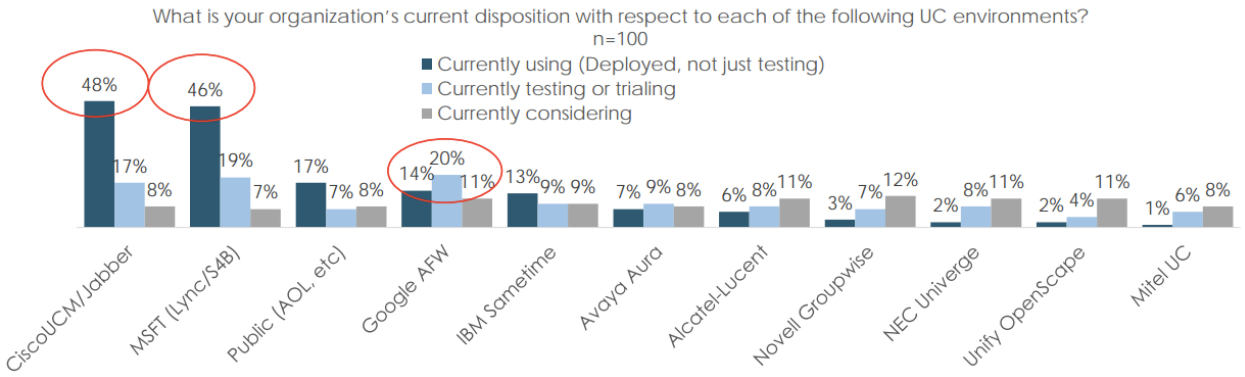
BlueJeans

# The Skype for Business Phenomenon

The concept of all centralizing all communication methodologies (presence, instant messaging, voice, video, and messaging services) within a single system and software client, a.k.a. unified communications or UC, is certainly not new. Not only does UC make sense from an infrastructure and cost viewpoint, it makes sense from a user experience and ease-of-use perspective.

Today, the vast majority of medium and large enterprises have deployed some form of UC solution. A Wainhouse Research (WR) Q4 2015 survey of 100 enterprise IT decision makers revealed that 96% of those organizations surveyed have deployed at least one unified communications platform. As shown in the chart below, Cisco and Microsoft hold commanding leads over other UC solutions.




At an event that WR attended in Q1 2016, Microsoft's Zig Serafin indicated that between on premise and cloud (e.g. Office 365) deployments, there are ~ 110 million Skype for Business or Lync[1] users around the world. This claim is also supported by WR's experience supporting large end-user consulting clients, many of which are already using or are planning to deploy and use Skype for Business within their environments. Given our estimate that there are only ~ 2 million group video conferencing systems in use in the field today, this 110 million SfB user figure speaks volumes.

Note, however, that many organizations have yet to fully embrace the video conferencing capabilities available within Skype for Business / Lync. In some cases, those companies have yet to purchase the necessary Skype for Business server licenses to support multi-party video. In other cases, they have yet to deploy the required servers. And some users are simply not satisfied, in one way or another, with the overall SfB video conferencing experience.

This study focuses on those organizations for whom Skype for Business video conferencing is not enough, and offers guidance for those seeking more than SfB can provide.

[1] Throughout this study, the terms Skype for Business or SfB will be used to mean Skype for Business and/or Lync.

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# The Skype for Business Video Experience

Microsoft Skype for Business (SfB) provides a high quality video conferencing experience. SfB video sessions can be ad-hoc or scheduled, can include two people (a point-to-point call) or more than two people (a multi-point or multi-party call), and also support content sharing.

Key video conferencing features provided by Skype for Business include:

**Connectivity and Reach**

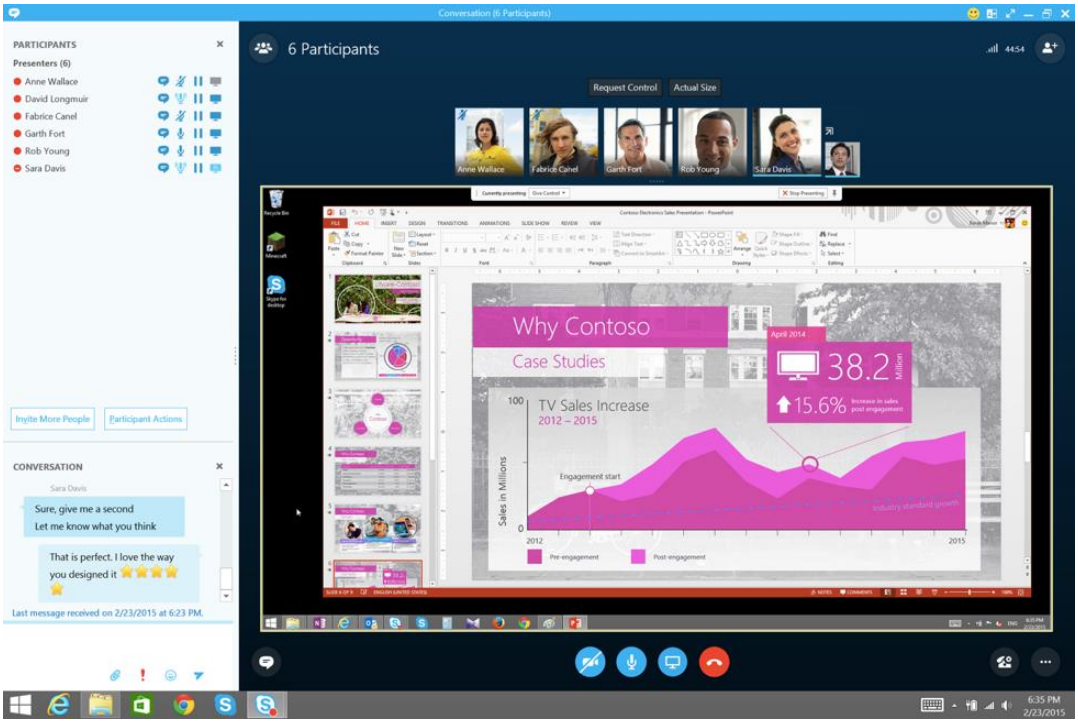
- Ability to connect to other Skype for Business / Lync users both within the company and outside the company (may require federating)
- Skype for Business / Lync software clients available for Windows, Mac, iOS, and Android

**Audio & Video Experience**

- A solid audio experience including wide-band audio
- Support for up to 1080p video resolution (depending on bandwidth / processor power available)
- Adaptive screen layouts that show up to five live video windows
- Support for panoramic camera aspect ratios (requires specialized camera)

**Content Sharing & Collaboration**

- A solid content sharing experience with support for PowerPoint animations
- Ability to share a single application or a user's entire desktop
- Support for basic collaboration including white boarding and annotation
- Ability to display both content and live video streams (of reduced size)




*Picture Courtesy of PC World*

**Call Control**

- Ability for the meeting host to define which participants are meeting hosts and can share content, promote / demote others, control the meeting, etc.
- Access to basic meeting control functions including video and audio mute, disconnect, local (client-side) session recording, etc.

**Summary of Skype for Business Video Conferencing**

Overall, we view Skype for Business video conferencing as an excellent choice for sessions involving only Skype for Business users. It is especially well suited for impromptu, two participant (point-to-point) communication sessions. However, the SfB experience is focused more on content sharing and less on live video, and SfB's multipoint calling features are somewhat limited. Furthermore, SfB lacks some call control features and management functions that admins may need to support their video environment.

# When Skype for Business is not Enough

In the spirit of full disclosure, it should be stated that Wainhouse Research uses Microsoft Office 365 and conducts Skype for Business video calls on a daily basis. Skype for Business is easy to use and offers a consistent workflow and solid user experience.

The above notwithstanding, there are times when Skype for Business doesn't deliver the video experience or meeting access that users expect. Examples for when users may wish to use a different video conferencing tool include:

**Video Experience**

- When the video portion of the session is at least as important as the content being shared.
- When you need a better video experience during multi-point calls (e.g. access to additional on-screen layouts, ability to view more live video windows on screen at a time, ability for moderator to push layouts out to all participants, etc.).
- When you want to provide your users with the familiar virtual meeting room / VMR workflow and allow internal users, external users, and even non-SfB users and systems to connect to a standing meeting room at any time.
- When you want your users to have more control over their personal meeting preferences such as the default on-screen layout and whether users enter the meeting directly or first arrive in a lobby (SfB offers only a small list of meeting personalization / user profile options).
- When you want your users to have more control during meetings (SfB's in-meeting controls are extremely limited)
- When you need centralized (not local / client-side) meeting recording and seek an easy way to share those recordings with others.
- When you want a high definition experience using less bandwidth (SfB video calls use 1.5 to 4 Mbps per 1080p video stream, and 768 kbps to 1.5 Mbps or more per shared content stream).

**Meeting Accessibility**

- When you want to communicate with others outside your company without having to:
    - Pre-approve the connection between your organizations (meaning without having to federate) so they can use the Skype for Business desktop client, or
    - Requiring users to install the Skype for Business web plug-in (may or may not be an issue for those users)
- When you want to include more than just Skype for Business / Lync participants. SfB natively supports calls to or from SfB users only, but not calls from SIP or H.323 clients or group video systems.
- For those situations when your hosted meeting includes a large number of participants (Skype for Business on-premise version supports up to 1,000 video, audio, and content sharing participants, but the hosted version / Office 365 supports a maximum of 250.
- When you have users on Mac or Linux systems (the SfB clients for these platforms are dated and feature-limited).

So what is a company or user to do when Skype for Business' native video capabilities are not enough?

**Option 1 – Deploy a Second Video Environment that Integrates with SfB**

This approach involves deploying a parallel video environment and shifting all (or at least some) of the video conferencing burden to the second system. While this can certainly improve the overall video experience, this typically involves a significant up-front and ongoing cost, added complexity, additional deployment time, additional management burden, and in some cases a more difficult user workflow.

**Option 2 – Use a Hosted / Cloud Video Conferencing Service (VCaaS)**

This approach involves the use of an external calling service to host the organization's video calls. Many hosted services today support interoperability between Skype for Business or Lync clients, internet browsers, SIP / H.323 systems, and more.

This approach involves little or no up-front cost, instead using an OpEx cost model. But most importantly, this option is very simple for the enterprise as it does not require the purchase and deployment of a parallel video environment. In addition, time to benefit is almost immediate, and little or no management is required.

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# Solution Spotlight

The sponsor of this study, BlueJeans Network (BJN), offers a cloud-based video communications service that addresses many of the Skype for Business video limitations described above. Specifically, BJN offers:

**Connectivity and Reach**

- Supports connections from and interoperability between various types of systems and clients including Skype for Business and Lync users, SIP and H.323 group video systems and software clients, internet browser users (without a plug-in using WebRTC), and telephone-only users. Also supports expedited meeting entry from messaging tools such as HipChat and Slack.
- Supports connections from Windows, Mac, iOS, and Android clients

**Video & Audio Experience**

- A high quality video and audio experience
- Stronger on-screen layout options including ability to define user preferences / choose layouts
- Support for 16:9 aspect ratio for non-HD callers (common with personal / mobile systems)

**Content Sharing**

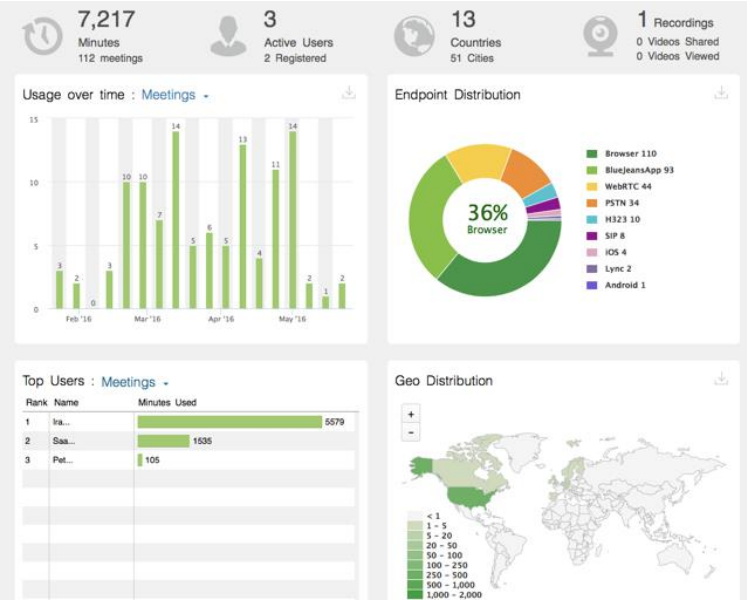
- Bi-directional content sharing between all participants on all platforms (SfB, SIP, H.323, etc.).
- Ability to share a single application or a user's desktop
- Enhanced on-screen layout control including the ability to dynamically adjust the size of the video and content windows

**Call Control**

- Stronger call control options than available with Skype for Business. Specific features include remote video and audio mute, switch over to telephone, change layout for all participants, lock the meeting, mute participants on entry, and more
- Support for cloud-based meeting recording with integrated content access control system

**Administrative Functions**

- Decreased bandwidth requirements (BlueJeans requires only ~ 700 kbps for an H.264 1080p video stream compared to 3 – 4 Mbps for Skype for Business[2])
- Access to detailed call detail records (usage data)
- Centralized dashboard showing information about the overall environment
- Production control of meetings in progress (ability for admins to manage calls to support users)
- Access to usage reports and detailed analytics
- Detailed information about each connection during and after each call (see screenshot below)




The key takeaway here is that the BlueJeans Network calling service offers a wide array of features and functions not available within a native on premise or hosted Skype for Business or Lync environment.

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[2] Source: https://technet.microsoft.com/en-us/library/gg425841.aspx

# Conclusion

Skype for Business is a heavily deployed, heavily utilized communication platform. And it has earned its place as the primary unified communications (UC) client for organizations around the world – including Wainhouse Research. However, as with many multi-function offerings, not all of the functions within Skype for Business offer best-of-breed performance. Skype for Business video conferencing, for example, provides a solid experience, but lacks the accessibility, video performance, bandwidth efficiency, call control, and video management capabilities needed by many organizations.

Skype for Business-powered organizations seeking an enhanced video experience with greater accessibility for users and stronger management for IT have two basic options: deploy an additional video conferencing environment that integrates with (and augments) Skype for Business, or shift their video traffic onto a completely different video conferencing platform.

In addition, organizations have the option to select, purchase, and deploy a product-based solution for installation on premise, or leverage a hosted / cloud service offering. While there are times when an on premise solution makes more sense, WR believes that many organizations would benefit from the scalability, ease of use and management, and business model offered by hosted video calling services.

The sponsor of this study, BlueJeans Network, offers a video collaboration service that is well suited to meet the needs of large, medium, and small enterprises, and addresses many of the limitations of the Skype for Business video experience. In addition, BlueJeans allows users to participate in video sessions using their familiar SfB / Lync desktop or mobile client.

For organizations using Skype for Business but seeking a superior, more accessible video conferencing experience with improved bandwidth efficiency and enhanced call control and management features, the BlueJeans Network service is worthy of serious consideration.

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# About the Authors

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# About Wainhouse Research

**Wainhouse Research**, www.wainhouse.com, is an independent analyst firm that focuses on critical issues in the Unified Communications and Collaboration (UC&C). The company conducts multi-client and custom research studies, consults with end users on key implementation issues, publishes white papers and market statistics, and delivers public and private seminars as well as speaker presentations at industry group meetings.

# About BlueJeans Network

(Copy provided by BlueJeans Network)

**BlueJeans Network** delivers cloud-based video communications that connect people, build relationships and drive business growth. Video is an immersive, face-to-face experience that enables people to work more collaboratively and makes businesses more efficient. The BlueJeans Enterprise Video Cloud is trusted by businesses around the globe to enable video conversations, meetings and events. This gives peace of mind to IT leaders and unleashes the workforce to be their best, wherever they are in the world. BlueJeans Network is a private company headquartered in Mountain View, California. For more information go to: http://www.bluejeans.com or follow the company @BlueJeansNet.