Voice Selection Guide for Microsoft Cloud PBX / Skype for Business Online

TeamMicrosoft@polycom.com
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This guide is an information resource to help you select Polycom voice solutions to use with Microsoft’s Cloud PBX powered by Skype for Business Online.
Making the Transition from the PBX to Unified Communications (UC) in the Cloud

With new Skype for Business services for Office 365 customers; Skype Meeting Broadcast (worldwide), PSTN Conferencing (US at this time), and Cloud PBX and PSTN Calling Services (US at this time)—cloud communications services powered by Skype for Business Online are gaining visibility and are now being deployed. Customers can realize substantial savings by eliminating expensive external conference services. Customers can also reduce CAPEX investments and time spent maintaining/upgrading on premise equipment—like an aging PBX or IP PBX.

We live in a world of Unified Communications (UC). Your employees are using many devices to communicate. A phone is still needed, but its use as a “stand-alone” device is changing. With UC, you now have a wider range of communications options—IM/chat, video calls, phone calls, calling from PC clients and mobile devices (BYOD). Unlike the PBX, where communications usually starts with dialing a number from a telephone dialpad or an autodial key, UC communications often starts with an instant message (IM). As IM becomes the new dial tone (“U there?”, “Can you talk now?”), when you want to talk, you expect to be able to place your call from the device that delivers the best audio experience. At the desktop, it’s your phone. In the conference room or huddle room, a conference phone.

For meeting spaces, Polycom® RealPresence Trio™ 8800 is 1st smart hub for group collaboration for Skype for Business—it gets invited to your Skype for Business meeting when you schedule the meeting room. Walk in the room and join the meeting with a touch of a button right from the calendar reminder displayed on the RealPresence Trio 8800’s user interface. Experience superior audio conferencing with RealPresence Trio from huddle rooms to the boardroom and deliver the full range of the human voice enabling you to hear every inflection. Not only does RealPresence Trio provide amazing sound quality, but with the addition of the optional Polycom RealPresence Trio Visual+ accessory, it also redefines its category by serving as the smart hub for your group collaboration and brings easy-to-use, no-compromise visual collaboration to meeting spaces that were previously cost prohibitive.

For desktop phones, Polycom® VVX® Business Media Phones are integrated with Skype for Business and allow you to easily go from IM chat to a phone call—right from your Skype for Business client. Video is also part of the Skype for Business experience and your VVX phone provides an important audio option. Many PCs lack adequate speakers and microphones. Employees don’t want to wear headsets all day. With Polycom VVX phones’ Better Together over Ethernet (BToE) support for media path, when you start a Skype for Business video call from your PC client, you can use the superior audio available on your VVX for the microphone and speaker instead of the PC’s built in audio. When the BToE client plugin is installed on your PC, the VVX shows up as an available audio device when you right click on the speaker icon in your PC’s task bar.

For every day calls, Polycom VVX phones are ‘always on’, so joining a conference call from a pop-up reminder on the phone will be welcome sight, especially if you are late to the office because of bad traffic—no need to startup your PC and launch the Skype for Business client to join the meeting already underway. You can literally join the call as you sit down in your chair.

You can also see your Skype for Business “favorites’ right on your phone. Seeing presence status in color instantly informs you. This is a very different experience than just seeing an “on hook / off-hook” status from a multi-line appearances that only shows the busy status of the desktop phone—your previous PBX phone experience. Instead of single number ‘autodial keys’ on a PBX phone, ‘Contact Cards’ on your VVX phone offer several different ways to reach your party—or just leave them a voicemail.
Trends Influencing Growth of Skype for Business

- High PBX support costs and the need to replace fully depreciated end-of-life (EOL) equipment
- Microsoft “Enterprise Voice” is growing double digits per quarter while IP PBX vendor lines shipped remain flat or are decreasing, depending on the vendor
- Teleworking and shared offices are lowering business real estate costs
- Tight integration with Microsoft Office applications; customers are rapidly moving to Office 365
- “Should we do it in the cloud?”—asked in nearly every IT project initiative
- Customers who try Skype for Business love it—and it has a great ROI

Top Business Applications & Use Cases

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Choosing the Right Phones

Selection Decision Points

- Audio quality matters
- ‘Always on’ phones with feature keys
- User profiles and feature needs
- Microsoft Cloud PBX phone choices
- Conference rooms
- Phone vs Client/headset or BYOD

Audio quality matters
Polycom’s leadership in audio technology is well recognized—it starts with Polycom HD Voice and Polycom Acoustic Clarity technology, which give you the superior quality audio experience you expect from Polycom. Polycom’s high-fidelity audio sounds like you are in the same room, whether you are using a handset, speakerphone or plug in a headset. For desktop phones, the pace of innovation on the Polycom VVX business media phones continues to impress. The VVX phones now include support for Polycom’s award winning Acoustic Fence™ technology, which actively listens and removes disruptive sounds from cube mates, water cooler talk, and open workspace. Support for features like Boss/Admin, Better Together over Ethernet, Group Paging, Intercom, Customizable Music on Hold, and Expansion Modules complete the picture. VVX phones deliver the showcase user experience in Microsoft environments.

‘Always on’ phones with feature keys
While some users will be comfortable using a Skype for Business client with a headset or USB phone, there are several reasons why users will prefer an entry level “always on” phone like the Polycom VVX 300 or Polycom VVX 310. When you are using the CX300 R2 USB phone or a headset with a Skype for Business client, the PC must complete its “boot up” sequence including launching Skype for Business. If you are late to the office because of bad traffic and you need to quickly get on that morning conference call, you won’t want to have to wait for your PC to boot up to join the call. An entry level phone like a VVX 300 or VVX 310 will always be on and ready to make or receive calls. The VVX supports meeting pop-up reminders and outlook calendar integration, making joining scheduled calls easy. Another benefit of having phones like the VVX series is easy access to useful feature keys. For example, having a dedicated feature key labeled “transfer” may be easier for some users to find than having to remember to click on “more” in the upper-right corner of the Skype for Business client screen to find it. While a dialpad can be brought up in the Skype for Business client screen, many users who are used to a PBX experience enjoy the convenience of it always being there on a phone.
User profiles and feature needs

While a VVX 300 or VVX 310 may be a good choice for some office workers, looking at user profiles and features is important to select the correct phone type for each user’s needs. When you start using more features, many are easier to use with a larger color screen. This is where a “hands on” experience can be beneficial in selecting phone models. Schedule a visit to a Polycom office or your Polycom channel reseller’s office to see the different models. Many larger customers plan for a Skype for Business voice trial with a variety of phone models to compare how different phones operate. Will the managers and executives be answering their own calls or will they have an administrative assistant doing this? Will knowledge workers want to see individual voice mail listings, look at presence status of their ‘favorites’, join conference calls from a scheduled conference calls list? If yes, than a larger screen display on the phone makes it easier to navigate and access these features and increases productivity. Are certain individuals acting in the role of an attendant? They may want a phone that supports expansion modules. Up to 3 expansion modules can be connected to any of the VVX models.

Figure 1: User Profiles / Use cases

Larger touchscreen on the VVX 600 showing the user’s contacts presence status
Microsoft Cloud PBX phone choices

In the early days of Office Communicator 2007 through the platform evolution to Lync 2010, the Polycom CX600 was the most popular phone sold in Microsoft UC environments. However, the Polycom VVX phones have seen 6 major software releases (UCS 4.1, UCS 5.0, UCS 5.1, UCS 5.3, UCS 5.40A, and UCS 5.4.1) sequentially adding more and more Skype for Business/Lync features to the VVX over time—gaining “table stakes” feature parity with the CX600 and finally exceeding CX600’s features in many areas. The CX600 has 2 Ethernet ports and features like Contacts, Photos, Message waiting indicator, Survivability, E911 (US only), Call Park, Individual Voice Mail listings, Calendar, Join Conference, “Better Together” operation with Skype for Business client, and an integrated call log—it has been the right mix of features for thousands of customers over a number of years. The software in the CX600 runs on an embedded Lync client called “Microsoft Lync Phone Edition” designed by Microsoft. According to Microsoft Product Lifecycle information, mainstream support for Microsoft Lync Phone Edition software is through 04/10/2018 with extended support available until 04/11/2023, aligning with Microsoft’s lifecycle support plans for Lync Server 2013. For Office 365 Cloud PBX deployments, if you own CX600’s already, bring them along. Otherwise, Polycom recommends choosing VVX series phones. Let’s see why.

In contrast to the CX600, the Polycom VVX phones are VoIP (Open SIP) phones that are qualified by Microsoft under the Microsoft 3rd Party Interoperability Program (3PIP). With Polycom’s UCS 5.3 software release introduced in March 2015, the VVX series phones included the most requested features that the CX600 offered—and added more capabilities and features. While the CX600 may be still a suitable fit for some customers, the VVX series phones now offer a far more compelling feature set with more capabilities. The VVX series is the phone platform where Polycom’s current feature development for Skype for Business is focused.

Important features on VVX phones that are not on CX600 or other Lync Phone Edition models include:

- Boss/Admin
- Group Paging
- Intercom
- Selectively Restrict Features (i.e. lobby
- Customizable Music on Hold
- Acoustic Fence
- Expansion Module Support
- Consultative transfer
- Touch Screen Interface (VVX
- USB Headset Support (VVX 500/600)
- Bluetooth Headset Support (VVX 600)
- Custom Applications and
- Electronic Hook Switch (EHS) support
- 802.1X Authentication
- Better Together over Ethernet (BToE)
- Auto-Answer

Figure 2 on the following page represents the VVX series models starting with the VVX 201, VVX 300 and VVX 310 with monochrome displays. The VVX 400 and VVX 410 have larger color display and more
lines, but are still "button operated". The VVX 500 and VVX 600 each have touchscreen displays. Having a larger color screens makes the UC experience on the phones come alive. Having 'presence aware' features and displaying the contact’s presence status in color changes the communications experience. The presence status of your ‘favorites’ informs your communications choices. The VVX 300 and VVX 310 show your own line plus 5 favorites (monochrome). The VVX 400 and VVX 410 support showing your own line plus 11 favorites in color. Color makes it easier to see ‘available’ (green), ‘away’ (yellow) and other extended presence status indicators at a glance. If you see “Do not disturb” (red), leave them a voicemail. If you see “Away”, dial their cellphone number if it’s urgent. Holding down the button next to a “favorite” brings up their contact card showing contact numbers and a voicemail option. Color expansion modules can be added to your VVX to see even more favorites, but it makes more sense to add it to the models that support color—VVX 400/410, VVX 500, or VVX 600. The VVX 600 supports Bluetooth headsets. The VVX 201, VVX 300 and VVX 400 have two 10/100Base-TX Ethernet ports while the VVX 310, VVX 410, VVX500 and VVX 600 each support two GigE ports. To use the Better Together over Ethernet feature, you simply connect one Ethernet port on the VVX to the LAN and then plug the PC’s Ethernet port into the other Ethernet port on the VVX. When ordering VVX phones, be sure to order the “Skype for Business Edition phones with order codes ending in “019”. This ensures that the VVX phone as the minimum software release required to support Office 365 Cloud PBX deployment and the phones are preconfigured for easy installation.

Figure 2: Polycom VVX Series Desktop Phone Selection for Office 365/Skype for Business Online

Figure 3 on the following page represents the CX series choices for Skype for Business Online. The CX100 speakerphone or a CX300 R2 USB phone often works well as a “2nd phone” for employees who need to make early morning or evening calls from their home office using their Skype for Business client—even when a VVX phone may be the phone sitting on their desk at the office. The CX600 Desktop Phone and CX3000 IP Conference phone both support “Better Together” operation with the Skype for Business client when plugged in via USB, however Polycom recommends the VVX series phones and RealPresence Trio (with newer technology and more features) over the CX600 and CX3000 if you are purchasing new devices.
Conference Rooms and Boardrooms
Space planning websites cite conference room ratios ranging from one conference room to 10 employees in an all open office environment—to one conference room per 20 employees in a private office-rich environment. Some executive private offices have around the table meeting room space within the executive’s office. So for a company with 500 employees, one might expect to deploy 25 to 50 or more conference room phones. As of January 2016, the selection of conference phones for the Office 365 Cloud PBX includes:

- **RealPresence Trio 8800** - the first smart hub for group collaboration with options that transforms the iconic three-point conference phone into a voice, video¹ and content sharing system
- **CX3000 IP Conference Phone** - an affordable “always on” conference phone running an embedded Lync client
- **CX5100 Unified Conference Station** - connects via USB to a PC running Skype for Business and supports 360 degree panoramic video and active speaker view

Polycom recommends the RealPresence Trio 8800 for most conference rooms. It is Polycom’s newest state-of-the-art smart hub for group collaboration and shares many of the same features found on the VVX series phones—and so much more. It can also be associated with its conference room Exchange calendar so, when you book your room, the RealPresence Trio is also invited to your Skype for Business meeting. Connecting to your meeting is easy with the meeting reminder on the touch screen display. Users walk into the conference room, touch the meeting reminder and connect. It has a microphone radius of 20 feet (6 m) and can also support wired or wireless pairing of your portable devices (BYOD)—especially useful when you have visitors who may want to use the wireless “guest network” to connect to an alternative conference service. Add on the optional RealPresence Visual+ and share content without

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¹ A software update is planned for early 2016 improving video performance in Skype for Business environments.
unsightly or hard to route wires from the conference phone to the monitor in the wall. When ordering RealPresence Trio conference phones, be sure to order the “Skype for Business Edition” unit with order code ending in “019”. This ensures that it has the minimum software release required to support Office 365 Cloud PBX deployment and that it is preconfigured for easy installation. RealPresence Trio units with part numbers ending on ‘-018’ can be upgraded to support Office 365 Cloud PBX to deliver equivalent functionality.

The CX3000 IP conference phone has a similar user interface and experience to the CX600 desktop phone. There are many CX3000s installed with customers running Lync 2013 and Lync 2010 environments. They are easily brought along to an O365 Cloud PBX deployment or purchased as a low priced conference phone option for smaller rooms. The CX5100 Unified Conference Station is a USB only option that, in addition to having a microphone range of 20 feet (6 m), offers a 360 degree panoramic video experience with a 2nd active speaker view in 1080p HD video with Skype for Business. The CX5100 is also one of the camera options available with the CX8000 Skype for Business room system—a dedicated room collaboration solution, purpose-built for Microsoft UC to deliver exceptional visual collaboration capabilities.

Phone vs Client/Headset or BYOD
Some small and medium-sized businesses (SMBs) may be told that “You don’t need phones. Just use headsets and BYOD for all your calls”. There are some notable use case objections to a client/headset-only strategy. Most users will not want to be tethered to a corded headset all day when working at their PC. Bluetooth headsets can be used with PCs or users’ personal mobile devices, but batteries on Bluetooth headsets and smartphones or tablets sometimes end up at ‘zero charge’ leaving the user with no way to make a call. A USB phone like the Polycom CX300 R2 offers PC users more choices than “only a headset”. With the CX300 R2 USB phone attached to your PC, you can make a call with the choice of a handset, speakerphone or headset (via headset jack on back of the phone). You will also appreciate having access to a telephone dial pad and feature keys like mute, and volume control. Headset/client-only users are sometimes distracted by having to find these controls in the Skype for Business client while they are working. As the USB phone is powered from the USB connection, the USB phone is like having a “telephone insurance policy” for Skype for Business client users who use Bluetooth headsets and BYOD clients—if their Bluetooth headset reaches ‘zero battery’.

Next steps
Contact Polycom and set up a visit to one of our many Executive Experience Centers, especially if you are also considering video in your UC migration plans. Many of our channel partners will also be able to demonstrate Polycom phone operation in their local offices. If you are a small business and don’t know where to start, contact us from our www.polycom.com page and choose from the contact options available on right navigation bar on any page. We can answer your questions and help you find a partner that serves your geographic area.

Questions? Contact TeamMicrosoft@polycom.com
Resources

Data sheets for Polycom phones and conference phones recommended in this guide are attached. Click on any datasheet listed below to open it in a new window.

Polycom VVX Business Media Phones and Accessories
- REFERENCE GUIDE Polycom VVX Business Media Phones, Skype for Business Edition
- Polycom® VVX® 600
- Polycom® VVX® 500
- Polycom® VVX® 400/410
- Polycom® VVX® 300/310
- Polycom® VVX® 201
- Polycom® VVX® Color Expansion Module

Polycom RealPresence Trio
- Polycom® RealPresence Trio™
- Polycom® RealPresence Trio™ Visual+

Polycom CX Series Desktop Phones
- Polycom® CX600 IP Phone
- Polycom® CX300 R2 Phone (USB)

Polycom Conference Phone, Speakerphone, and Unified Conference Station
- Polycom® CX3000 IP Conference Phone
- Polycom® CX100 Speakerphone (USB)
- Polycom® CX5100 Unified Conference Station