Today, there is only one Microsoft partner with a broad Lync qualified portfolio and Skype for Business voice and video expertise—Polycom. Polycom has 40+ solutions for Microsoft. This guide is an information resource to help you select the right desktop phones and conference room solutions for Skype for Business / Microsoft Lync.
Making the Transition from the PBX to Unified Communications (UC)

We are now in a world of Unified Communications (UC). Your employees are using many devices and modalities to communicate. A phone is still needed, but its use as a “stand-alone” device is changing as end users now have a wider range of communications options afforded by UC including chat, video, and communications on phones or mobile devices (BYOD). As IM becomes the new dial tone (“U there?”, “Is now a good time to talk”), when your users want to talk, they expect to be able to place their phone call from their UC client. For most companies today, that UC client is Skype for Business¹ (formerly known as Microsoft Lync). While the user may want to place their phone call from their UC client, they also want to be able to use a telephone dial pad to dial numbers, access features with convenient feature keys, and be able to choose between using a handset, headset, or speakerphone—and they want to use their phones in ways that are fully integrated with Skype for Business.

Challenges

- Transitioning from “Voice/IP PBX” to Unified Communications
- Supporting new work models such as teleworking and shared office spaces
- Finding the right phone and conference phone for each user and room environment

Many IT departments currently supporting Lync are finding they do not need the traditional PBX or IP PBX anymore. They already own the Client Access Licenses (CAL) needed to “voice enable” their Skype for Business / Lync environment or an upgrade to the license is affordable and easily justified. As existing phones and the IP PBX are fully depreciated or as the lease term expiration nears, many are considering making the switch to Skype for Business in order to reduce operating costs and allow end users to seamlessly communicate with more devices and modalities. Some companies are also reducing real estate costs with teleworking and shared office/hoteling workspace configurations. Skype for Business, with the right selection of phones, fits equally well for these growing, non-traditional work environments as well as in the traditional office environment. Polycom’s large selection of Microsoft qualified products helps simplify the transition from “PBX/IP PBX” to “Unified Communications with Skype for Business”. Many Enterprise-sized companies have started the transition to voice-enable Skype for Business / Lync with a limited “Lync voice trial” to evaluate which phones best fit end-user and room environment use cases. The same practice of doing a small scale trial for evaluation purposes will be equally applicable for forthcoming releases of Skype for Business. Polycom has endpoint and room solutions that match any user profile and office environment need for voice — and for video.

Trends Influencing Growth of Voice in Skype for Business / Microsoft Lync

- “Lync Voice” is growing double digits per quarter, faster than any other IP PBX vendor
- “Should we do it in the cloud?” asked in nearly every IT project initiative
- Teleworking and shared office working modalities, lowering real estate costs
- High PBX support costs and fully depreciated equipment End-of-Life

¹ Microsoft Lync was rebranded as Skype for Business in March 2015. Learn more about Skype for Business. Both terms “Lync” and “Skype for Business” are used in this document, depending on context.
<table>
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<tr>
<th>Application / Use Case</th>
<th>Polycom Solution</th>
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<tr>
<td>Moving from the PBX to Unified Communications with Microsoft</td>
<td>Polycom + Microsoft together deliver a <strong>ROI as high as 98%</strong> as organizations transition to UC</td>
<td><strong>Total Economic Impact Of Polycom Voice Solutions For Microsoft – Forrester Study</strong></td>
</tr>
</tbody>
</table>
| Unique 360-Degree View Experience for video calls           | Only Polycom offers center-of-room, 360-degree video/audio experience for Lync with the CX5100 and CX5500. | **Polycom CX5100** (USB Only)  
**Polycom CX5500** (USB + VoIP)  
CX5500/CX5100 video data sheet |
| Low cost USB phone for working at home, office, or shared office | Only Polycom offers a USB phone—a better choice than “just a headset.”.            | **Polycom CX300 R2**  
**USB Phones Offer More than a Headset**                                                   |
| Conference room phones for Lync                            | Only Polycom offers “always on” conference phones that are qualified for Lync       | **Polycom CX3000**  
**Polycom SoundStation Duo**  
**Polycom SoundStation IP5000**                                                             |
| Installed audio solutions for large rooms (auditoriums, classrooms, boardrooms) | Only Polycom offers an installed audio solution with a VoIP card that is qualified for Lync | **Polycom SoundStructure Installed Audio Solutions**                                        |
| “Better Together” operation with Lync client                | The Polycom CX600 is the top selling Lync phone with “Better Together” via USB. Only Polycom offers DHCP support for VVX phones with the “Better Together over Ethernet” feature | **Polycom CX600**  
**Polycom Better Together over Ethernet Feature Profile 87907**                           |
| Advance features that enhance productivity                  | The **Boss/Admin** (shared line appearance) feature on VVX phones allows the admin assistant to screen the managers calls | **Polycom and Microsoft Lync are changing the way we make phone calls**                      |
| Touch Screen User Experience                                | Only Polycom offers color touch screen phones that are Microsoft Qualified          | **Polycom VVX 600**  
**Polycom VVX 500**                                                                         |
| Superior quality audio with Polycom® HD Voice™              | **Polycom® HD Voice™** combines industry-leading full duplex, echo cancellation, and noise reduction with advanced voice processing to give you the superior quality audio experience you expect from Polycom | **Polycom HD Voice: Innovators Spotlight**                                                    |
| Cloud ready solutions                                      | Microsoft announced at Enterprise Connect 2015 that “Polycom’s VVX business media phones will be the first phones to support PSTN calling in Office 365”. | **Skype for Business is here—and this is only the beginning**                                  |
### Customer Case Studies

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<td>Elleuno</td>
<td>The UC environment lets Elleuno’s 2,300 employees connect face-to-face using high-definition video and voice, and they can speed decisions by sharing content in real time.</td>
<td><a href="#">Read more</a></td>
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<td>Belfast Health and Social Care Trust</td>
<td>The Trust looked to reduce operational costs on the support of their defunct PBX’s and offer a superior user experience to the users. As part of their Microsoft Lync, Polycom integration rollout, the Trust added 5,000 Polycom CX600 IP phones.</td>
<td><a href="#">Read more</a></td>
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<tr>
<td>Freudenberg Sealing Technologies</td>
<td>“The Polycom CX phones are an extension of the Lync environment. With the on-screen presence status indicators and crystal-clear HD voice technology, we maximize productivity, and encourage collaboration.”</td>
<td><a href="#">Read more</a></td>
</tr>
<tr>
<td>Granite School District</td>
<td>“The Polycom CX300 phones offer an advantage over USB headsets. Teachers want the familiarity of a handset and physical keypad, even if they can use them to check visual voicemail, and engage in videoconferences”</td>
<td><a href="#">Read more</a></td>
</tr>
<tr>
<td>National Institute of Water and Atmospheric Research (NIWA)</td>
<td>“Once I got a team up and running, it’s really great to be able to get in touch with them from day to day, just pick up that phone because you’ve got that presence.”</td>
<td><a href="#">Read more</a></td>
</tr>
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Additional Microsoft related Customer Case Studies

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**Voice Selection Guide for Skype for Business / Microsoft® Lync®**

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Polycom CX5100 Unified Conference Station

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**Polycom**

- 97% of Fortune 500 use Polycom
- 14M Voice devices sold
- 7 of 10 Lync voice handsets sold are Polycom
- Lync 40+ Solutions for Lync in market today

**Canalys Estimate, June 2014 (70.4% worldwide)**
Selecting the Right Phones

Selection Decision Points
When making decisions on choosing phones for a Skype for Business or Lync voice deployment, the following topics will likely be discussed with Polycom, with your channel partner or with your service provider:

- Skype for Business/Lync Online, Lync On-Premises Server, or Hybrid installation
- Phone vs Client/headset or BYOD
- User profiles and feature needs
- Microsoft qualified phone choices
- Conference rooms
- Investment protection
- Planning, Network Assessments and Services

Skype for Business/Lync Online, Lync On-Premises Server, or Hybrid installation
Small and medium-sized businesses (SMBs) without full time IT/Telecom staff will typically choose a service provider or channel partner and rely on their expertise for recommendations on a suitable Microsoft UC architecture and phone selection. Enterprises who will manage some or all aspects of their own Microsoft UC deployment will play a more active role in designing their architecture. Some enterprises choose to engage consultants in considering their deployment strategy. Many customers begin the decision making process with a small scale Lync voice trial. The same practice of doing a limited trial ahead of the planned migration would apply equally well for Skype for Business. Today, if a Lync 2013 or Lync 2010 server is deployed on premises, the full range of Lync qualified phones is available for selection. Skype for Business Online provides many of the features and capabilities we typically associate with real-time communications—IM, video and desktop collaboration features. What has been missing in the last few years with Lync Online is the ability to place PSTN2 calls. Microsoft recently announced that PSTN calling with Skype for Business Online will begin to roll out in North America in the 2nd half of 2015. PSTN services will expand to other countries in 2016. At Enterprise Connect 2015, Microsoft announced that “Polycom’s VVX business media phones will be the first phones to support PSTN calling in Office 365”. For many customers, this announcement will heavily influence the choice of desktop phones in favor of the Polycom VVX Business Media Phones over other available choices. The initial “preview” rollout of the Office 365 “Cloud PBX with PSTN Calling” is U.S. only at this time. Cloud PBX with PSTN Calling provides users with the ability to make and receive traditional phone calls in their Skype for Business client, and to manage these calls using hold, resume, forward and transfer. This preview is built on the enterprise voice technology available in Lync Server and Skype for Business Server, and runs on Azure. Enterprises moving to Office 365 requiring the full set of current Enterprise Voice features available on Lync 2013 or Skype for Business 2015 Servers may need to rely on hybrid deployments. SMBs may also continue to find a suitable solution with Service Providers who are hosting a Skype for Business / Lync solution as a managed service.

Phone choices fall into two categories, those with embedded Lync clients and SIP phones qualified with Lync. An example of a popular Polycom phone with an embedded Lync Client is the Polycom CX600. An example of a conference phone in this category is the Polycom CX3000. Microsoft also qualifies IP phones through their 3rd Party Interoperability Program (3PIP). Popular Polycom phones that are qualified with Lync under this program include the Polycom VVX Series Business Media Phones and the Polycom SoundStation Duo and SoundStation IP 5000 conference phones. Before we dive into a phone model comparison, we should first look at the use case for a USB phone.

2 PSTN acronym means Public Switched Telephone Network
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 headset and BYOD 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 both headsets and the smartphones or tablets can 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 the user’s PC, the user can make a call with the choice of a handset, speakerphone or headset (via headset jack on back of the phone). Users will also appreciate being able to 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 Lync 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 Lync client users who use Bluetooth headsets and BYOD clients when their headset reaches ‘zero battery’. Your employees will likely be using many devices—phones, UC clients with headsets, and BYOD—the choice depends on where they are and what is the best user experience from the choice of devices they have available. When users are sitting at their desk, the CX300 R2 USB phone or an ‘always on’ phone like the ones we will consider next will often provide a better user experience.

USB Phone or ‘Always On’ Phone with More Feature Keys?
While the CX300 R2 USB phone can work for users who are comfortable with using the Skype for Business or Lync client, there are several reasons one might choose an entry level “always on” phone like the Polycom VVX 300 or Polycom VVX 310 (the 310 model offers GigE ports). When you are using the CX300 R2 USB phone or a headset with a Lync client, the PC must have completed its “boot up” sequence including launching Skype for Business / Lync. 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. A low cost phone like a VVX 300 or VVX 310 will always be on and ready to make or receive calls. The VVX series phones, as of UC Software release 5.3, also support meeting pop-up reminders and outlook calendar integration, making joining scheduled calls very easy. Another important benefit of having phones like the VVX series is access to more feature keys. If the CX300 R2 USB phone user needs to transfer the call, there is no key labeled “transfer” on the phone. The operation is easy enough to do from the Lync client, but for someone who is used to using a phone coming from a PBX environment, they will expect to find a key or soft key labeled “Transfer” on the phone. Or consider the “Call Park” feature—any user in an open office environment who desires privacy and needs to park their call and pick up again in a nearby vacant “huddle room” or conference room would use the “Call Park” feature. Having “Park” as a feature key on a phone is much more intuitive then remembering that you have to hover over a Lync client’s phone/mic icon to initiate a hold/transfer operation where “parking a call” is an option. The VVX phones have visible soft keys labeled “Transfer” and “Park” while you are on an active call. The CX300 R2 USB phone does not.
User Profiles and Feature Needs
While a VVX 300/310 may be a good choice for many office users, 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, some of the available features are easier to use with a larger screen than you get on an entry level VVX 300/310. 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 Lync voice trial with a variety of phone models to compare how different phones operate. In considering phone models, one needs to understand the various user profiles and use cases associated with their profiles. 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 team ‘Lync favorites’, join conference calls from a scheduled conference calls list? If yes, then a larger screen display on the phone makes it easier to navigate and access these features and consequently 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

In the early days of Office Communicator 2007 through Lync 2010, the Polycom CX600 was the most popular phone sold for Microsoft UC environments. However, the VVX Business Media phones now have had 4 major software release (UCS 4.1, UCS 5.0, UCS 5.1, and more recently UCS 5.3) that have sequentially added more and more Lync features to the VVX phones over time, both gaining feature parity with the CX600 in terms of ‘table stakes’ features and also exceeding the features available on the
CX600 in many other 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 Lync client, and an integrated Lync call log—it has been the right mix of features for thousands of customers over a number of years. The lower cost CX500 model only has one Ethernet port and does not support “Better Together” operation via USB so is therefore better suited for wall phones common areas, and lobbies. The software in the CX500 and CX600 running the phone’s feature operation is an embedded Lync client named “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.

In contrast to the CX600 and CX500, the Polycom VVX Series Business Media phones are VoIP (OpenSIP) phones that are qualified by Microsoft under the Microsoft 3rd Party Interoperability Program (3PIP). Until recently, the next step in the phone selection decision process was often comparing the CX600 phone, a proven and popular office phone with an embedded Lync client designed specifically for Lync to the VVX model phones like the VVX 300, VVX 400, VVX 500, and VVX 600. With the latest UCS 5.3 release, the VVX series phones now offers the most requested features that the CX600 offers, and now adds many more capabilities and features—Boss/Admin (Shared Line Appearance), 802.1x support, color expansion modules with contacts’ presence indicators, Open SIP registration (non-Lync IP PBX) support, group paging, push to talk, Electronic Hook Switch (EHS) support for headset features, touchscreen interfaces (VVX 500/600), video camera options (VVX 500/600), USB Headset Support (VVX 500/600), and Bluetooth headset support (VVX 600). The VVX series is the phone platform where Polycom’s current feature development for Skype for Business is focused. While the CX600 may be still a suitable fit for some customers, the VVX series phones now offer a far more compelling feature set and more capabilities. With the recent announcement by Microsoft that the VVX phones would be the 1st phones to support PSTN calling in O365—it’s pretty clear that the VVX phones are the phones that Polycom now strongly recommends. With more features supported however, there is more feature configuration involved for the VVX series phones compared to the CX models like the CX600. With tools like Polycom’s Zero Touch Provisioning tool, feature configuration on a large scale deployment is made easier. Event Zero’s UC Commander also supports VVX phone provisioning with a versatile and powerful layered provisioning approach. UC Commander recently earned the “Polycom Ready” logo as a Polycom Technology Partner.

Figure 2 on the following page represents the VVX series models starting with the VVX 201 (new in 2015), VVX 300 and VVX 310 with a monochrome displays. The VVX 400 and VVX 410 have larger color display and more lines, but still “button operated”. The VVX 500 and VVX 600 have touchscreen displays with the VVX 600 having the larger display. Having a larger color screen can be very useful. The concept of having features being ‘presence aware’ and displaying the contact’s presence status changes the communications experience. Presence status informs our communications choices. The VVX 300 or 310 supports showing the users own line plus 5 favorites for whom we will see presence status. The VVX 400 and 410 supports showing the users own line plus 11 favorites in color. Color makes it easier to see ‘available’, ‘away’ and other extended presence status indicators at a glance. Seeing the extended presence status of the person we are about to call listed as “Do not disturb” allows us to choose leaving them a voicemail instead of calling them directly. Seeing a presence status of “Away” would make dialing their cellphone number from their contact card the proper calling choice if we have an urgent matter to discuss. A color expansion module can be added to any VVX model, but it probably makes more sense to add it to a VVX 400, VVX 500, or VVX 600 when an expansion module is...
needed. The executive user and/or their assistant may want to have the expansion module attached to their VVX phone. Added expansion modules mean more favorites are shown. Having expansion modules also gives one button press access to the favorites contact cards. The VVX 600 is the only model that natively supports Bluetooth headsets, if that is a user requirement. The VVX 201, VVX 300 and VVX 400 have 10/100Base-TX Ethernet while the VVX 310, VVX 410, VVX500 and VVX 600 each support GigE.

**Figure 2: Polycom VVX Series Desktop Phone Selection for Skype for Business / Lync**

Figure 3 below represents the CX series model choices. The CX100 speakerphone or the CX300 R2 USB phones work well for full time telecommuters who might consider getting by with the Skype for Business client or as a “2nd phone” for an employee’s ‘home office’ for early or late day calls.

**Figure 3: Polycom CX Series Desktop Phone Selection**
The SoundPoint series phones are not detailed in this selection guide. Although the SoundPoint phones also qualified for Lync, the VVX models offer far more features than SoundPoint phones. If you already own SoundPoint phones from using them with an IP PBX prior to migrating to Lync, you can bring them along to your Lync installation and realize some benefit from your previous phone investment. However, it is still recommended that you consider the user profiles and their feature needs to see where the Lync feature limitations of the already owned SoundPoint phones may fall short of user requirements and expectations. As mentioned before, the VVX series phones are where the Skype for Business (Lync) feature development is happening at Polycom.

**Conference Rooms and Boardrooms**
Space planning websites cite the conference room ratios typically range from one conference room to 10 employees in an all open office environment and 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. Selection of a conference phone can consider:

- Better Together operation with Lync (CX3000)
- Analog and IP line support (SoundStation Duo)
- Conference stations that support Lync Video (CX5100, CX5500)
- OpenSIP qualified solutions with Lync (SoundStation IP 5000, SoundStation Duo, CX5500, SoundStructure)
- Large rooms, classrooms, boardrooms (SoundStructure)

*Figure 4: Conference Room Audio Choices*

For a company that selects CX600 as a phone for most workers, it would make sense to choose the CX3000 for the conference phone as the user interface for both devices is most similar. The SoundStation IP 5000 will also be a popular choice for small conference rooms and executive offices with a small footprint on tables and mic range of 7 feet (2.1 m). The SoundStation Duo offers both IP and
circuit-switched telephony platform support with failover/failback to analog and a mic range of 10 feet (3m). 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 Lync video experience with a 2nd video view of the active speaker in 1080p HD video. The CX5500 Unified Conference Station offers the same audio and video performance as the CX5100 when plugged in via USB, but also doubles as an audio-only conference phone from its control panel display for making calls when not plugged in via USB. The SoundStructure is an installed audio solution that can accommodate larger rooms and classrooms or provide optimal/balance audio pickup in boardrooms.

**Investment Protection**
A customer with IP PBX’s who wishes to consider a future migration to a voice-enabled Skype for Business solution should not be purchasing vendor proprietary sets today. Most IP PBXs support OpenSIP phones, so these customers should consider the Polycom VVX series phones for end of life (EOL) non-supported phone replacement in their existing PBX environments. For conference rooms, consider the Polycom OpenSIP qualified conference room solutions mentioned. For example, Cisco or Avaya IP PBX customers who also use Lync for UC should consider the CX5500 Unified Conference Station if they have not yet made a decision to voice enable Lync to replace their PBX. The CX5500 serves a dual role as the conference phone for audio only calls and as a USB plug-and-play Lync video device. One can register the “OpenSIP” phone portion of the CX5500 to the IP PBX now, and then register it to Lync instead later if/when the future voice migration to Lync or Skype for Business takes place. Users can enjoy video collaboration with Lync today with the CX5500’s 360 degree panoramic Lync video experience and its 2nd video view of the active speaker in 1080p HD video when plugged in via USB. It’s estimated that nearly 95% of the world’s conference rooms don’t yet support video, and the CX5500 is an compelling solution for customers who have the necessary Lync licenses to support video collaboration, regardless of their decision making progress with respect to migrating users off their legacy IP PBX to Lync for voice.

**Next steps**
Contact Polycom and set up a visit to one of our many Executive Briefing 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](http://www.polycom.com) page and choose “how to buy” or “contact us” from right navigation bar on any page and we can answer your questions and help you find a partner that serves your geographic area.
APPENDIX A

Data sheets for Polycom Lync qualified phones and conference phones recommended in this guide are attached.

Polycom VVX Business Media Phones and Accessories

- Polycom® VVX® 600
- Polycom® VVX® 500
- Polycom® VVX® 400/410
- Polycom® VVX® 300/310
- Polycom® VVX® 201
- Polycom® VVX® Color Expansion Module

Polycom CX Series Desktop Phones

- Polycom® CX600 IP Phone
- Polycom® CX500 IP Phone
- Polycom® CX300 R2 Phone (USB)

Polycom Lync Qualified Conference Phones and Installed Audio

- Polycom® CX100 Speakerphone (USB)
- Polycom® CX3000 IP Conference Phone
- Polycom® CX5500 Unified Conference Station
- Polycom® CX5100 Unified Conference Station
- Polycom® SoundStation® Duo Dual Mode Conference Phone
- Polycom® SoundStation® IP 5000 Conference Phone
- Polycom® SoundStructure® C-Series (Installed Audio)

Features Comparison

- Polycom Lync Voice Features Reference Guide

Microsoft Solution Overview

- Polycom Solutions for Microsoft® UC Environments