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Delivering on the Smart Video Promise

LifeSize Icon 600 and Virtualized UVC Applications – An Analyst's Review

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Robert Arnold

www.frost.com

INTRODUCTION

Video conferencing technology has been put to good use in business settings for many years. However, Frost & Sullivan has found that high-quality, reliable and feature-rich video collaboration sessions have historically been complex to arrange, launch and carry out. Over the years there have been great strides made to address many issues, yet R&D has often remained focused on technology advancements, with a true commitment to improve the user experience taking a back seat. User controls and interfaces were by and large left unchanged—they remained complicated, far from intuitive and often intimidating. For the most part, traditional video conferencing failed to address the simplicity that is needed to drive more widespread adoption and to increase utilization by many workers who could stand to benefit from the technology.

In today's era of pervasive smartphones and tablets in the consumer market, and with those devices increasingly making their way into the workplace, professionals have higher expectations for their communications experiences. Users expect logical menus that are easy and fast to navigate. It is in this area that yesterday's video conferencing systems often missed the mark. Thankfully, a new slate of solutions has come to market.

LifeSize has introduced new video collaboration solutions that are designed from the ground up to overcome the long-standing complexity of traditional video conferencing systems. The Smart Video™ experience couples LifeSize's next-generation Icon endpoint series with the advanced, software-based LifeSize® UVC Platform™ infrastructure and collaboration applications. This combination aims to make video collaboration—not just video conferencing—more intuitive and powerful for users, as well as more flexible and manageable for administrators. To do so, key elements of the solution were modeled after popular features delivered by smartphones and tablets.

Over the past several years, most video collaboration providers have evangelized their progress in terms of improving the user experience and simplifying the management of their solutions. With more and more options now available, it is becoming more difficult for customers to determine the true rate of progress, and which solutions really deliver on those promises.

It is here that unbiased industry analysts have an obligation to separate reality from marketing hype. As we conduct our communications and collaboration market research, Frost & Sullivan analysts are as hands-on as possible. It is against this backdrop that I set out to give the LifeSize SmartVideo experience a test drive, to see first-hand over a three-month period just how different this new solution is. This article chronicles my trial and outlines my findings.

PREFACE: PRACTICAL CONSIDERATIONS

The growing popularity of video communications is leading to a rapidly expanding array of choices for IT and line-of-business buyers. In addition to price and core feature set, it is

important that purchasers consider basic parameters before they even begin to shop for solutions. Companies need to be mindful of the environment in which they plan to deploy their investments. Where and how video conferencing equipment is placed in the office, boardroom or conference room has significant impact on usability and the user experience. Similarly, the solution architecture plays a large role in management and administration. Some practical questions prospective buyers should ask are:

- What size display is recommended for my space, and do I have sufficient room to wall-mount or stand the display? In relation to the display, and bearing in mind both power and cabling connections, what is the appropriate placement for the camera and codec? How far from or close to the camera, microphone and display should users sit?
- What are the support requirements: Are there multiple infrastructure platforms accompanied by multiple admin/management toolsets? Can the infrastructure be implemented on-premises or can it be hosted/cloud-based while retaining some level of corporate control? Does it offer flexible scalability and an applications set to accommodate a variety of use cases? If required, can end users handle basic install and ongoing maintenance tasks?

PRODUCT REVIEW

Equipment Installation

The LifeSize Icon 600 video conferencing solution that I trialed included the Icon 600 codec, LifeSize Camera 10x, LifeSize MicPod, and my choice of a third-party display (I selected a Samsung 32” 1080p LED flat panel). The Icon 600 codec requires a wired Ethernet connection to the network and HDMI connections to the display and camera. The camera, display and codec each require individual power connections through a surge-protected outlet. The MicPod is connected and powered over a LifeSize Link connection (which looks similar to mini USB) to the codec. My setup did not use a wall or bezel mount for the Camera 10X, which is approximately 7.25”x 6” and weighs nearly 3 lbs.

Exhibit I - Icon 600 codec, MicPod, Camera 10X and simplified remote control



I conducted my Smart Video trial as a remote user at my home office and set up the Icon solution myself. The LifeSize UVC Platform used for my three-month trial was powered through virtualized software and equipment located in a LifeSize data center. Aided by LifeSize or a qualified partner, my scenario is similar to what should be expected by non-technical users with limited or no on-site IT resources. Users co-located with on-site IT admin resources will find their initial install and ongoing maintenance experience even easier.

The Icon solution comes with an illustrated quick reference card that identifies components as well as provides pictorial instructions for set up. As helpful and intuitive as the instructions were, however, it would be handy if there were also labels on each part, as well as written instructions or captions along with the illustrations and color coding on the jacks and connectors. Specifically, the codec has both mini USB and LifeSize Link jacks, which look very similar and can be miss-identified by end users when plugging in components. The power adapters for the codec and camera also have the same pin and jack, but they have different watt amplifiers. It was easy for me to overlook this and incorrectly plug them in, which prevented the codec from fully initializing. This was a minor issue that did not damage the equipment and can easily be resolved by paying close attention during set up. More recently, LifeSize has remedied the amplifier identification issue by color-coding the power adapter plugs.

Exhibit 2 – Icon 600 codec



Overall, and discounting user error, the plug-and-play Icon design made my initial set up easy and fast—it took only a couple of minutes. While this speed of installation is becoming more typical of purpose-built video conferencing endpoints, it is not true of all the popular products available today.

Configuration

As a full-time home office worker, I use a residential AT&T U-Verse Internet and VoIP service, which relies on a premises-based gateway with an embedded firewall. At my home office, the download speed is 11.5 Mbps and upload speed is about 0.9 Mbps, which is a tad on the slow side but is adequate to support high-quality video collaboration with some minor, one-time call-rate adjustments via the Icon Web admin interface.

You don't need to be a tech wizard to set up the Icon and connect it to your network. Still, users setting it up themselves will need to know basic information about IP addresses, such as identifying their public IP address, the Icon's IP address and the IP address for their UVC instance. Further, if they are located outside the corporate network and using a firewall as

recommended, do-it-yourself users will need to know how to safely adjust firewall settings. For example, do-it-yourself users will need to allow ping, open pinholes and/or forward ports for connectivity to options such as LifeSize Manager and other UVC applications deployed at a site elsewhere in the corporate network or in the cloud. If the user can perform basic tech tasks such as setting up a Wi-Fi access point at home, then they should be able to handle basic Icon and firewall configuration. For users with available IT resources, this part of the process should not be a problem. Additionally, if the end user is licensed on the LifeSize UVC ClearSea application, there are mechanisms designed to bypass many of these set up and provisioning issues.

The Icon solution should be configured and provisioned by LifeSize or a qualified partner for any additional/optional UVC licenses that have been purchased—such as dual display, 1080p HD resolution (versus the standard-offer 720p HD resolution), and access to collaboration applications such as LifeSize® UVC Video Center™ and multi-party calling. Users and administrators will need to double check that all the correct options have been activated.

By the end of my trial, my set up included all the bells and whistles, except for the optional LifeSize® UVC ClearSea™ mobile video conferencing app and the dual display option, which simultaneously supports data content on one display and video conferencing on the other. Mid-way through my trial, LifeSize introduced a new beta release, which includes more robust recording capabilities and which should be generally available in summer 2013. Because my system was remote and on its own network, I had to perform the beta release upgrade using the Icon Web admin interface. Overall, the process was painless and took only about 10 minutes to complete—a prime example of how easy the administration of a software-based communications solution should be.

FEATURE HIGHLIGHTS AND ANALYSIS

Remote Control: The Icon remote control is one of the most dramatic departures from user controls common to traditional video conferencing systems. Gone are the numerous rows of color-coded buttons; the new Icon remote control offers a sleek, ergonomic design that allows users to focus on the display and their meeting rather than forcing them to look down while fumbling with buttons. The heads-up design has just two buttons: the video/audio mute button is placed at the top of the remote for fast and convenient access (I used this to quickly mute audio and video without disrupting my calls), and the select button is fully encircled by a toggle pad resembling a radio dial that makes navigation intuitive and natural. (Please see Exhibit 3.)

“The Icon remote control is one of the most dramatic departures from user controls common to traditional video conferencing systems.”

Exhibit 3 – Remote Control

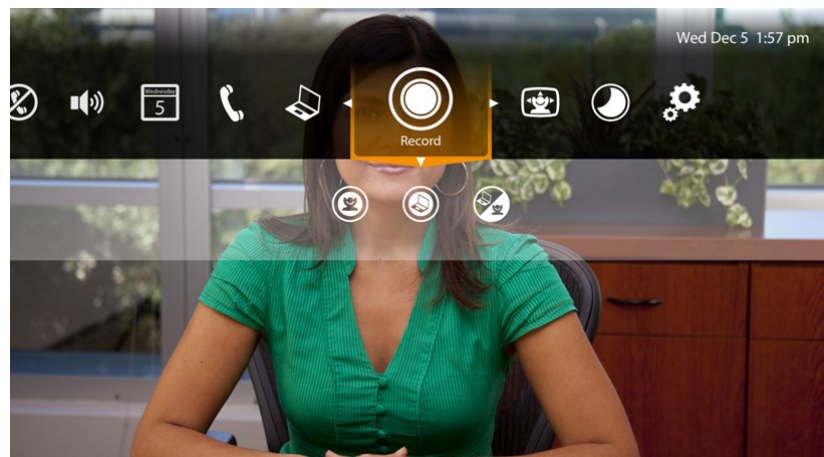


Camera: The full-feature LifeSize Camera 10x easily outclasses the capabilities offered with fixed cameras available with many other video conferencing systems. The Camera 10x connects to the codec and display via HDMI and offers the following functionality: 1080p60 capability; pan, tilt-zoom and 10x zoom control via the Icon menu and remote; and far-end control that can be blocked via Web-based admin settings. Additionally, users can pre-set 10 different views via the remote control for quick alignment with physical room configurations and the number of participants.

Menu: Another dramatic departure from traditional, complex video conferencing user interfaces, the aptly-named Icon interface has a layout modeled after those of smartphones and tablets. The menu bar appears at the top of the display and enables rapid scrolling to the left or right via the remote's toggle pad. The top-down menu design follows a smartphone or tablet concept, with four-way scroll and click-to-select maneuvering to dive deeper into home-menu options, such as system details, calling, volume, calendar, recording, presentation, camera control and more. Compared to other systems I've used, Icon's intuitive icon-based menu and simplified remote control reduced the time it took me to learn where things are and how to locate and launch features I wanted to use, whether mid-call or offline. There are also multiple paths to get to certain features, which also enhances the speed at which they can be accessed.

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Exhibit 4 – Icon UI/menu



Schedule: Today’s virtual meetings are often inefficient and get off to a late start due to issues with links and logins. The most successful Web conferencing solutions have evolved to enable a click-to-join process for pre-arranged meetings, but this capability is not available as a standard feature with most video conferencing systems. In many cases such simplicity is usually facilitated by managed services or IT administrators. LifeSize’s “Schedule” tab allows users to see all the meetings they are invited to host or attend and to join them with a single click. Administrators can schedule calls via the LifeSize® UVC Multipoint™ tab in the Web interface. Integration with Microsoft Outlook/Exchange lets users schedule and invite others to video calls the same way they can arrange audio or Web meetings. Further, it is possible for companies to embed the Web scheduler app into their secure Intranet. Unfortunately, the UVC release I tested lacked support for other calendar applications, such as IBM Notes or Gmail.

Underneath the home menu’s “Call” icon is a broader list of options to help organize contacts, and initiate and join meetings. These options include: Favorites, Recents, Directory, Meetings and Dialer.

- **Meetings:** The “Meetings” tab lets users join any published meeting or any meeting they have been invited to with a single click, or similarly join any meeting that was created as “open” and which is listed in the Meetings tab of all Icon systems. Meetings marked “private” are not visible to uninvited parties. The user’s personal conferencing bridge can also be listed under “Meetings,” enabling quick entry to sessions he or she will host. The aim of the “Meetings” features is to eliminate IVR bridges and the need to navigate to find meetings. I’ve found this capability very helpful, particularly as, like most people, I tend to look for meeting dial-in details just as the call is about to begin.
- **Directory:** The name-based directory lists company contacts alphabetically and lets users search by letter. While this setup is common, the LifeSize remote control offers comparatively speedier navigation. I did note, however, that the presence status of contacts was not displayed within the Icon directory. This feature is available in other video systems. (Note: presence indication within the directory is planned for a future release.)
- **Recents:** A list of previous calls is found under the “Recents” tab. This offers a fast way to reconnect with internal or external parties who may not have been added to “Contacts” or “Favorites,” which can be done via two simple clicks. This feature can be found in other systems, but I found the Icon process to be more intuitive.
- **Favorites:** The “Favorites” list is built by highlighting contacts, recent calls or names from the directory and selecting “add to favorites” from a drop-down sub-menu. Contacts can just as easily be deleted from the list. Both processes take just a couple of clicks. This feature is a nice way to personalize contacts as well as to quickly and seamlessly connect with frequent contacts inside or outside of the organization.
- **Dialer:** The advanced dialer can be used to call outside to partners and customers as well as colleagues that may have other systems deployed on different parts of the network.

For this feature, the Icon remote control clearly outclasses traditional controls for fast navigation and number entry. Although not a part of my trial, Icon 600 is compatible with LifeSize's second-generation touch-screen phone, which would clearly further simplify the user experience when it comes to dialing addresses that are not already in the directory or personal contact lists.

Health: Under the "System" option within the home menu, the "Health" tab lets users see the status of system components in real time, with clear terminology for troubleshooting and diagnostics. For example, when a MicPod, camera or network cable is unplugged, the system highlights the Health tab and gives an active alert telling exactly what is wrong. Because I moved my setup several times, I found this proactive alert feature a valuable time-saver.

Multi-party calling: LifeSize® UVC Multipoint Enterprise Edition™ supports the following capabilities: interoperability with Microsoft Lync users and with other standards-based systems; viewing of up to 49 participants on-screen; 1080p30 resolution; scheduling; and a dedicated encoder for each participant. While I did not attempt a call at maximum participant capacity, I did find it valuable to call or join calls with clients, Frost & Sullivan colleagues and contacts at other organizations, regardless of what standards-based system they were using. For the most part, the call setup and interactions took place as if we were all using the same system.

Layouts: Once in a meeting, the Icon's unified interface gives users the ability to change layouts during the call. Compared with other systems I've used, the Icon endpoint, coupled with UVC infrastructure, appeared to give me a greater breadth and depth of layout options for meeting participants, self-view, presentations and video feeds. It was also far easier to change my layouts with the Icon's on-screen control versus the cumbersome DTMF tones used with other systems.

Presentation: LifeSize Icon supports data and video content sharing in high-quality 1080p60. This content can be streamed to the conference from a computer connected to the Icon codec via HDMI or DVI connection. Sharing can be performed by meeting hosts as well as participants. Using the Icon remote, access to presentation and video sharing features are easy to find and use. Using a PC, content can also be accessed, manipulated and streamed from a user's LifeSize UVC Video Center account.

LifeSize UVC Video Center: I've often heard people refer to applications such as LifeSize UVC Video Center as being something like YouTube for the enterprise, but this solution is more robust than such a label would imply. Residing on the UVC Platform or delivered by LifeSize as an appliance or on VMware/Hyper virtual machines, UVC Video Center is a collaboration solution that enables recording, editing, management and distribution of visual content.

- Users get their own account to create, store, manage, and share content. Users can create their own videos offline or in session. From the Icon menu users can select the source to be recorded, whether camera, presentation or both. This means that all participants, the presenter and the presentation can all be captured in a single recording. There are

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also features that allow users to change from the camera to the presentation during the recording. Other solutions in the market lack this capability, but in my trial, perfecting the exact sequence of source selection took a bit of practice.

- Recording keys let users pre-configure their recording settings. This option eases the process of adjusting settings such as bit rate, recording sources, user name, channel, live streaming, tagging, presentation quality and URLs for different scenarios. Recording keys can be helpful in optimizing resources such as bandwidth and ensure the appropriate options are consistently employed.
- Users can take advantage of the Web-based UVC Video Center user interface to upload content from other sources, as well as manage the recording of Icon calls, organize and edit content, and personalize file titles. Video clips can be posted to a user’s homepage, while content can also be marked private or available to others within the organization.
- In addition to streaming recorded content in live calls, secure or unencrypted HTML links can be emailed for offline viewing inside or outside the firewall. Furthermore, comment features facilitate an ongoing dialog about content at any time, while text chat allows for real-time conversations during live calls.
- Video Center is managed from a utility set common to other UVC applications. This should be welcomed by organizations looking to empower their workforces with more robust functionality without increasing the burden on IT.

Administrator Web-Based UI: There are multiple Web admin interfaces to enable the Smart Video experience: a UI for the Icon endpoint itself, and a UI for UVC Platform apps and infrastructure.

As an optional feature that can be allowed with permissions from IT, users can perform a number of tasks from the Icon Web admin UI, such as setting “Preferences” and using the “Call Manager” to adjust bandwidth and call type, and to enter and dial numbers rather than using the remote dialer from the display. There are also diagnostics and maintenance tabs that may occasionally come in handy for users (I used them to perform my beta upgrade locally). Since I did not have a phone integrated with my solution, I found the Web UI a quick way to dial numbers than I had not called before. These can then be quickly added to contacts, favorites, etc., from the display’s UI. The Icon Web UI can also be used to view call logs and to adjust system settings such as call speed and call type (i.e., H.323 or SIP).

The UVC Platform administrator UI presents a single point of access for users to access their UVC applications, such as their UVC Video Center, UVC Multipoint (multiparty calling), UVC Manager (scheduling) and other features they are licensed to use. Although I found both UIs well-organized and easy to navigate, I would personally like to see a single UI for end users from where they can manage their endpoint as well as their UVC Platform apps.

Importantly, the UVC Platform administrator UI provides a single portal to access both user apps (UVC Video Center, UVC Multipoint, UVC ClearSea) and system apps such as UVC

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Manager, UVC Video Engine for Microsoft Lync, UVC Transit Server/Client, and UVC Access. This single point of entry and common tool set across all system components has long been missing from traditional video conferencing systems that have been built over the years with a bolt-on approach, and it is still not available with several leading alternatives today. IT administrators will find that this capability eases the burden of initial setup and ongoing maintenance, reporting, monitoring and more, as well as reduces the training required to become proficient with the tool set.

CONCLUSION

Sometimes, it takes a new approach to solve old problems. With its Smart Video experience, LifeSize is challenging the status quo of what most users perceive video collaboration to be. The new LifeSize Icon Series, coupled with LifeSize UVC Platform apps and infrastructure, is a powerful combination that tackles that challenge head-on. While I did experience some hiccups with my trial, most of these were easily overcome, and I expect that Smart Video will continue to evolve and improve going forward. Without unnecessary complexity, users new to video collaboration technology can be confident that an intuitive solution has arrived. Even power users will find it more convenient to conduct video calls and will be encouraged to expand the features they routinely use on the LifeSize system.

Silicon Valley

331 E. Evelyn Ave. Suite 100
 Mountain View, CA 94041
 Tel 650.475.4500
 Fax 650.475.1570

San Antonio

7550 West Interstate 10, Suite 400,
 San Antonio, Texas 78229-5616
 Tel 210.348.1000
 Fax 210.348.1003

London

4 Grosvenor Gardens
 London SW1W 0DH
 Tel +44 (0)20 7343 8383
 Fax +44 (0)20 7730 3343

877.GoFrost • myfrost@frost.com
<http://www.frost.com>

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 Mountain View, CA 94041

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