Is cloud video conferencing the silver lining for the unified communications industry? Well, it certainly seems so. Geny Caloisi interviews the main players in this industry to find out how using cloud VC is opening new doors.

Cloud's ahead for UC&C

F or a long time users have been polishing the genie's lamp making these wishes: we want a reliable video service, that is as good as the TV in our living rooms; we don't want to worry about what VC system our clients, partners or employees have in order to talk to them face to face; we want cheaper; we want everywhere; we want flexible and scalable; we want simplicity... Can you blame them? Well, no. The fact is that until now not all these wishes could be granted, at least not all at once.

Using the cloud for video conferencing seems to be the way forward to satisfy a trend that is emerging from the users themselves. Not only are video cameras on desktops and free VC software such as Skype making video calls an every day occurrence; also smart phones and tablets with visual communication capabilities are so widespread that they cannot be ignored.

The trend of BYOD (Bring Your Own Device) to work is here to stay and if we take into account the number of current mobile and tablet users, the potential for this market is huge. But this calls for better interoperability and flexibility.

Stu Aaron, BlueJeans chief commercial officer says: "If you add together the 2-3 million video conferencing rooms in the world, with the 700 million Skype users,

the 300 million Google users, the 100 million Microsoft Lync users, and the 2 billion browsers out there, you have billions of people that are already using video conferencing. According to Wainhouse Research, there are about 100 billion minutes of audio conferencing services sold worldwide each year but only about 200 million minutes of video conferencing.

"At BlueJeans our goal is not to grow the video conferencing market by 20 or 30 or even 50 per cent, our goal is to convert audio conferencing users to video conferencing users. If we are successful at converting just one per cent, then we will create a video market ten times larger than the entire current market. There's no reason to believe that with a service that makes a video meeting as easy, as interoperable, and as affordable as an audio conference, we can't do better than that."

BlueJeans is only one year old and has set up its whole business around cloud-based video conferencing services. Its platform is interoperable with any video conferencing room, desktop or mobile application.

"We've built the video equivalent of the audio conferencing 'meet me' service that everyone is already familiar with," emphasises Aaron. "There is no hardware to buy or software to download. Our subscribers get a virtual meeting room in the BlueJeans cloud."

Andy Wright from Video Corporation, a cloud VC

distributor summarises: "The real advantage of VC in the cloud is that there are no up-front costs or ongoing maintenance or upgrade costs. Implementation and service expansion is easy, unlimited and virtually instant."

However, Ian Vickarage from VC distributor Imago cautions: "There has been a real challenge for people to make money selling just cloud VC."

Imago sells VC solution: hardware, software and services. It has two cloud-based VC offerings: VideoMeet and Vaast (video as a service trade only). The latter is Imago's own service for which it uses Vidyo's technology. VideoMeet is the result of the partnership between Deutsche Telekom and BlueJeans, to create a multi-party videoconferencing service.

Telecom companies are clearly seeing the opportunity in this sector, according to Sharon Shechner, head of marketing at Radvision (now part of Avaya). For instance, France Telecom-backed Orange Business Services, has introduced Telepresence Pass, a cloud-based video conferencing service for enterprises. The company has formed alliances with companies such as Avaya, Cisco, Microsoft and Polycom to name but a few.

"But the interest is also growing amongst system integrators and companies wanting to provide video as a service," adds Shechner.

< Avaya is a UC provider and right now it is working on an interesting proposition to offer Cloud VC after acquiring Radvision, a manufacturer and developer of video networks and video-enabled products and services. The company offers a Cloud VC platform for service providers, which can be either integrated to an existing service/portal via the platform APIs. or sold with a complete out-of-the-box multi-tenant application for offering video conferencing as a service.

Radvision uses Scalable Video Coding (SVC), an extension to the H.264 video codec standard, that is used by most of today's video conferencing devices. SVC allows video conferencing devices to send and receive multi-layered video streams composed of a small base layer and optional additional layers that enhance resolution, frame rate and quality and adapts to the capability of the receiving device in terms of bandwidth and video quality.

Marty Hollander, Vidyo's senior vice president of market development expands: "Vidyo was the first to pioneer use of H.264 SVC for video conferencing. While the traditional video conferencing vendors (Cisco, LifeSize and Polycom) remained stubbornly attached to only using H.264/AVC, Vidyo showed the tremendous advantages of this new compression standard, and we used it to build a new architecture for delivering multipoint video conferencing that has changed the economics of this industry.

"Vidyo created a gateway to provide backward compatibility with these legacy architecture solutions, and it allows for easy interoperability with all the traditional vendors. In July 2012, Vidyo took it one step further, completely changing the industry by announcing VidyoWay which makes interoperability a competitive advantage through this free service for the existing legacy architecture endpoints."

VidyoWay is a cloud-based interconnectivity service that is being rolled out this autumn. Vidyo enables cloud video conferencing in three ways through partners who deliver the service to the market: VidyoConferencing as a service to end-user organisations; Vidyo licenses which

Cloud-based comm and VCaaS solutions are penetrating well in the SMB space.

can be integrated into applications and online services; and SDK licenses for partners to build an application that uses the technology to enable visual communications.

Hollander adds: "One major example of this is Google+ Hangouts where the technology to enable the multipoint video is Vidyo technology."

Andrew Hug, VP telepresence, Polycom points out: "We can provide the same video services that it offers on-premise through the cloud, via service providers. Polycom RealPresence Cloud is provided with the same standards as on-premise offerings. The video-as-a-service (VaaS) offering is carrier grade, meaning it supports up to 75,000 concurrent devices and 25,000 sessions. There are different ways of providing video conferencing through the cloud. Some customers will have their own infrastructure and devices and just need to be equipped with the service (a hybrid solution) whereas others will want to subscribe to all of the above."

Of all VC manufacturers, LifeSize is the only one that offers a cloud-based product direct to market, LifeSize Connections.

Michael Stephens, general manager of LifeSize UK recalls: "In LifeSize Connections version 1.0, we set out to accomplish two main objectives: (1) enable LifeSize

room endpoints to utilise cloud-hosted infrastructure components for important functionality such as directory, firewall traversal, and bridging, and (2) to enable seamless calling between our endpoint lineup and remote desktop users on PCs and Macs. Having accomplished these, we are now turning our efforts toward broadening the types of endpoints that that our users can call starting with non-LifeSize standard-compliant room systems. We are simultaneously working on apps for iOS and Android tablets and smart phones. Note that we have always supported unlimited free guest invitations for desktop users."

There is a peak take-up in medical, retail and the SME sector of cloud based VC. Banks and other organisations that deal with sensitive information are a little bit slower on the adoption, but since bandwidth is not an issue and interoperability is being sorted by using standard technology (H232 and SIP), anyone wanting to use video without having to have a big initial investment is looking to the cloud.

Polycom's Hug explains: "The reasons companies are adopting cloud VC may be due to cost savings: VaaS is provided through an Opex (operational expenditure) rather than Capex (Capital Expenditure) model – so customers can pay on a monthly basis rather than having a large upfront payment. Another possible reason, >

> ❝ *With 15 - 50 employees and semi-regular video conferencing cloud-based services are probably absolutely perfect.* ❞
> *- Michael Stephens, LifeSize UK*

< particularly in the case of retail customers, is because the solution is scalable, it can deal with spikes in demand."

Stephens from LifeSize says: "Cloud-based videoconferencing is very much an application that is of its time for the right company. With 15 - 50 employees and semi-regular video conferencing cloud-based services are probably absolutely perfect. If you're dealing with a larger company –maybe 1000 employees and a lot of video conferencing then perhaps we would recommend deploying something in house."

Security is one of the issues that always crops up when it comes to placing large chunks of data outside company premises. However, clients, according to the experts, should overcome these fears.

StarLeaf director of operations and marketing Hellene Garcia says: "The StarLeaf solution is fully encrypted, and all the StarLeaf clients are authenticated with signed certificates to prevent impersonation and toll fraud. In general video is more secure because you can actually see who you are speaking with at the other end."

StarLeaf delivers reliable and secure hosted video conferencing solutions in the cloud. The systems is plug-and-play, it configures automatically and there is no training needed for our customers.

Magor, a company that provides peer-to-peer multiway conferences with no need for central bridging infrastructure, is trialing its Visual Collaboration as a Service (VCaaS). Magor uses advanced SVC++ encoding to deliver HD1080p.

About security Ken Davison, Magor's VP global sales & marketing comments: "In a public cloud service like Skype or Facebook, a walled garden architecture is employed to protect the security and privacy of the individual accounts that are using shared cloud resources. Similar, proven techniques can be applied to a video cloud service. A private, business-grade, scalable VCaaS deployment would dedicate private resources in a secure tier three data centre to each enterprise account."

Donald McLaughlin, director, UK&I Collaboration at Cisco adds: "There is no better point from which to enforce security than within the network. The hosting of essential features such as session encryption, intrusion prevention, and spam blocking is more easily managed there, as is the ability to trace, identify, and grant or deny access to resources.

"A comprehensive strategy for security is essential to any UC deployment, especially given the trends toward mobility, consumer devices, and social software. At the same time the value of a UC solution increases with wider participation and information sharing and too restrictive a security policy will limit user adoption. What is needed is a flexible balance between control and access that protects enterprise resources while encouraging open communication."

With BOYD on the up in corporate environments, bandwidth no longer a crucial issue, plus the push from smart phones and tablet users to access meetings on the go, the conditions are right for Cloud VC to expand. The Cloud VC market is expected to grow to approximately $460M by 2015 according to Gartner Research. But who will dominate the market? It could be a VC specialist but it might also be a popular end user solutions provider such as Skype or Google. ◊