



# The Myths around the Cloud and VoIP

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**Moderator:** Celine Akrey

Celine Akrey:

Welcome to UniVoIP Cloud Technology webinar, "Laying the Ground for Success." Today we are lucky to have with us two well-established gurus in the cloud industry. First, I want to welcome Larry Hettick, Editorial Director and Senior Research Fellow at Webtorials. Larry is a 30-year Silicon veteran who has been mostly focusing on UC. Also with us today, Chris Vuillaume, VP of Business Operation at UniVoIP, who has nearly 20 years of business and software and SaaS leadership experience.



If we move to the agenda today, I would like to talk about what is VoIP, how can it benefit you and why. We will also cover the myths around the cloud and the VoIP. What to believe and what really are pure myths in the industry? Also from a cloud standpoint, what should we expect in the upcoming years? Will you be able to keep up with the new trends? Then, finally, we will discuss the necessity of having a disaster recovery plan and we will wrap up showing a few snapshots of our live administrative web portal.

If time allows it, we will address the (inaudible) received throughout this webinar. So, now let's get started. I'm going to hand it over to Larry to talk about the world of voice over IP. Larry?

Larry Hettick:

Great, thank you, Celine. Yes and I want to begin first kind of with some definitions around VoIP, why it will be useful to you and then, what's next. So, we can move onto the slide that talks about the (inaudible) voice over IP.

We've had voice over IP for at least two decades in one form or another. At its most basic, voice over IP is digitized voice that gets transmitted over an IP session. And there are a couple of ways that you can receive this. In some cases, voice over IP is integrated with data access, so for example, you can buy a trunk that is integrated with your MPLS connection or a broadband connection. In some cases, voice over IP is offered over the top, so in other words, you buy a broadband connection separate from the voice over IP service. And we also have options for both premise-based services or cloud-based services and then, we also have solutions that are hybrid.

So, for example, you might have a premise-based solution like an IP PBX sitting on your campus location with cloud-based services for most branch offices. Or, it could also be international because for example, if you have a U.S.-based company and you want to have cloud in one location and premise-based in others, it can also be geographically diverse.

So, the next thing that we probably should understand is that today's voice over IP uses something called SIP. It's called Session Initiation Protocol. And SIP is really an IP-specific session protocol that



is designed for multimedia services, including not only voice, but also video and that's important because that lays the foundation not only for multiple services, but the ability to offer some additional features that we'll talk about in a few minutes.

VoIP kind of offers the foundation for integration for other applications including unified communications and collaboration. VoIP is really step one to delivering a UC solution, or unified communications solution, using voice as the starter (inaudible). So, let's move onto the next slide and talk about why VoIP is useful.

VoIP is useful for several different reasons. Number one, generally VoIP, voice over IP, can offer you cost savings over legacy voice solutions. This is true because the service is based on integrating your data and voice sessions together, so you don't have to dedicate channels to voice only. It's also true because the infrastructure is really a computing-based platform as opposed to a switching-based platform. So, we can use VoIP as an application that co-exists with other applications.

Another thing that's important about voice over IP infrastructure is that it's location-agnostic, so you can have, for example, your service exists in the cloud or it exists on-premise and it doesn't have to sit where your callers are making their phone calls or receiving their phone calls.

Another really important feature of VoIP is something we call presence and for those of you who have used instant messenger services, you notice that someone is either on-screen and off. That's what presence monitoring is all about. SIP, that we talked about previously, enables presence and it allows us to monitor where people are and to manage our call (inaudible) based on where we are or where we're not. IP and VoIP also support multiple endpoints so you can have a softphone, desk phone, mobile device, any of those are options for voice over IP.

From a feature perspective, voice over IP also offers these services like click-to-call, so you can, for example, click on a user name or a click to conference people, and you can do that from directories that are integrated on your screen or on your phone, the same directories that, for example, you use for your email or for corporate accounts and that makes it a lot easier to use.



And finally, VoIP is useful because it offers desktop controls for both users and administrators. You can configure what screens you want to see. You can configure when you want to be called. You can, for example, say that you're out of the office. With a simple click, as opposed to having to reconfigure your phone system, you can reroute your calls and you can all do that on a profile basis per-user or per-company as the administrator sets it.

And with that, I'd like to turn it over to Chris to talk a little bit about some of the myths about cloud-based PBX.

Chris Vuillaume: Thank you, Larry, yes, and voice over IP is also now primary to deploy using cloud-based solution in cloud-based architecture and, you know, having, you know, being on the road the last 15 years, talking a lot about, you know, cloud-base and voice over IP, a lot of customers are still worried, or still have predisposition against cloud or against voice over IP, and here's a couple of principal myths and idea about cloud.

You know, first one is, of course, is when you move to cloud, most of the people are thinking that it's just a way of saving money and it's only that, or the customer think that, you know, that it's not really customized, it's not really integrated with the local data base, with my local CRM, or you know, some customers thinking that this is all-or-nothing proposition. You know, you basically rely on cloud. If the cloud is down, you're out of business.

Some customers are thinking that cloud cannot deliver the performance necessary for voice. You know, it's true that, you know, browsing a website is very different from, you know, carrying a real-time voice communication where a millisecond counts, which is not the case when you just browse a website. So, how they deliver, how the cloud will be able to perform.

Or, you know, cloud is – when you move to cloud, sometimes, you know, IT people think that they are losing control. They cannot see what's going to happen with their network. Or, this is also very, very important as a concern is, is it secure? Do we have a way to really secure all the communications



across the cloud? Are we (inaudible) the Internet or not? Or my conversation will be tapped or not?

Cloud also lock you into a relationship with cloud vendor, but is it true or not, or cloud is unproven. Some customers think that it's really a brand-new technology and then, some cloud vendor doesn't offer a service-level agreement, which makes the customer a little bit scared about moving to cloud. Last, but not least, cloud-based UC is maybe not a front-burner issue today.

So, let's really look at a couple of myths and see if we can, you know, what is the reality and the experience. So, if I go to one of the first one is about the money and the money, because cloud now is an OPEX. Customer pay on a monthly base instead of a big operating expense, or big capital expense, at the beginning of the project. Is it like a big save money and the reality is yes. It does save money, all the (inaudible) studies showing between 20-50% of, you know, for a typical five-years timeframe, people are saving money by going cloud instead of basically traditional premise-based deployment. So, it's really clearly a saving-money proposition.

However, you have additional value and advantage moving to cloud. One of them is faster implementation. As a matter of fact, all cloud application are more about activating the service than installing software. You don't have to install software. Activation is now the click of a mouse and you have a new user. So, really faster implementation, for sure.

Greater adaptivity. You can, you know, remove users, add and remove features as you need, you know, along – you don't have to really add additional software. You don't have to really add additional hardware. So, it's a greater adaptivity. You can really move your business and your communication services in the same way.

Visible and predictable cost. With a monthly recurring charge, you have a predictable cost. You can see, you know, you don't have surprise. You don't have a spike of additional costs when someone is installing software or, you know, updating your hardware and software. So, predictivity of costs, which is very important for CFO.



Better reliability. Now, you can really put the pressure on your cloud vendor to guarantee service-level agreement, to guarantee up-time, which is very difficult to obtain within your IT staff. So, very, very important aspect here, reliability and guaranteed with service-level agreement contract.

Last, but not least, elimination of ongoing ownership burdens, you know, beyond upfront CapEx when you buy your PBX or unified communication with premise base, you have to plan about 50% of the initial acquisition cost for the ongoing maintenance over the life span of the premise-based solution. So, keep that in mind. It's not just about the initial investment when you buy premise-based, but it's also how you're going to maintain the software, the hardware so you provide support. So, those advantage are especially relevant to UC, which require nonstop uptime, a big challenge for IT team.

Let's talk about, let's say, a myth number three, the cloud is all or nothing for a population. Maybe Larry, you can take that one?

Larry Hettick:

Certainly. Yes, we talked earlier about the fact that voice over IP can be managed in multiple configurations and that's also true in terms of adopting voice over IP on a gradual basis, or on a per-location basis and in fact, that's actually pretty typical of how deployments start. It's pretty unusual to do a full cutover to voice over IP unless you're a small office with a single location. Generally you'll try it with a few users first, or a few locations first, before you move to a wholesale cutover.

There are also some options, though, about how that gets managed on the premise and in some cases, your voice over IP system can be managed on your premise by the service provider, or it can be managed in the service provider's data center and sometimes it's a virtual arrangement.

Sometimes it's a dedicated arrangement, so for example, you have your own servers and your own equipment that goes with that and really, I think the most important thing about this is that this can be very adaptable based on the situation and what's best for you.

And so, if you have some locations or some users, even, that want to use voice over IP and some that want to remain on a legacy system, or you have some where you simply want to give them an



extension or a softphone capability without any equipment—without even an IP phone you can do that—so, very adaptable technology so that you can look and see what the users need in terms of their voice and unified communications services and then, you can construct that and work with your service provider to construct that to give you the solution that best fits your individual needs.

Well, another thing that I'd like to talk about very briefly is on this number six, and that's about security. Back when we first started offering voice over IP, there was some concern about the fact that VoIP wouldn't be secure because it wasn't a traditional switch telephone network. And I kind of have to chuckle a little bit because when I started in telecom 30 years ago, we had handsets in telephone repair that allowed us to use a little clip onto a line and we could listen on pretty much anyone's conversation if we chose to do that. Now, there were some laws preventing that, but technology-wise, it was pretty straight-forward technology to be able to tap into a voice line.

I will suggest that voice over IP is much more secure than the old legacy, switched network for lots of different reasons, including the fact that the equipment, just like the old equipment used to reside in a central office which was a very secure place, equipment can reside in your premise, or in a service provider's cloud and we've got not only the ability to monitor its physical security, that just like we monitor our data transactions, we have professional tools that allow us to secure, watch for intrusion attacks and support that can be as secure, if not more secure, than any data network.

Now, having said that, I'm going to point out that there is no such thing as an absolutely secure network, just like there's no such thing as an absolutely secure physical facility. There are ways to break into it, so don't miss that trick. However, work with your service provider or your infrastructure provider to make sure that they're giving you the level of security that you're comfortable with based on the cost to maintain that security.

There's also some other techniques you can use for VoIP, including encryption and Chris, I'm going to hand it over to you to talk about encryption because that's something that we didn't have way back when, available (inaudible) to use, but it's pretty commonplace now for using voice over IP encryptions to make the call be more secure. Chris, you want to talk about that?



Chris Vuillaume: Yes, true, and as mentioned by Larry, a lot of things happened with the emergence of SIP and along the way to secure SIP type of voice traffic—we call it the RTP traffic inside the SIP session, the emergence of standard call SRTPs, secure RTP emerge and a lot of vendors, a lot of cloud vendors, are now deploying SRTP to encrypt to voice. So, even if you have, you know, voice over IP over broadband, over Internet, you can really secure the voice traffic from basically the phone you have at your desk to basically the cloud vendor on either side, across the Internet. So that's really something to definitely push your vendor to check, making sure that they are using this RTP.

The other thing is also a lot of customers are now putting MPLS network between their cloud vendor and a customer site, allowing to really have not only the (inaudible) and the (parity) on the voice side across that pipe, but also having more secure link between the data center of the cloud vendor and your customer location. So, those are the kind of more and more customer deploying those things, SRTP and why the cloud, or private sector, or private networking, between the site and the cloud vendor. I can go to the next slide. Larry?

Larry Hettick: Great. I'd like to next to talk about what comes next after voice over IP. You know, I started the conversation by suggesting that voice over IP is a foundation for unified communication, so once you've deployed VoIP in your network, you're going to find unified communications is kind of the next step beyond VoIP.

Unified communications allows you, for example, to have one single screen for all your communications' needs, whether it's text or email or voice mail, you have the ability to click and open, for example, a voice mail, on your screen. You have the ability to click to call from your screen, to make a voice call to another user on the network, or through a gateway to the regular PSTN. And those are all things that we call unified communications.

The other thing that's pretty typical is once you've deployed unified communications is the ability to collaborate. So, we do, for example, screen-sharing. We do remote dial-in for video conferences and audio conferences and those are all things that are kind of enabled by voice over IP.



The other thing that voice over IP allows you to do is to retire your PBX and if you've got a legacy PBX, you're probably finding that at least traditional PBXs are kind of getting hard to find parts for and support for and they're expensive. And one thing that you may or may not be aware of is that down the road, the telephone companies are going to be pretty much unplugging their traditional POTS networks, the plain, old, telephone service network.

In fact, AT&T plans, by 2020, to replace the PSTN with an all-VoIP network. So, if you want to keep that PBX in-place, you're going to either have to go out and buy a gateway that will convert it to IP, or you're going to have to make the conversion to voice over IP in your offices and frankly, in your homes.

The other thing that, at least for service providers that VoIP enables is host the unified communications and collaboration, so you see a lot of service providers who've, particularly in the last two or three years, offering not only voice over IP, but the collaboration technologies that allow their uses to subscribe to some of those features and those are all hosted in the cloud. That's kind of where voice over IP is going in the next five years.

So, with that, Chris, I'm going to turn it back to you to talk about some real examples about what cloud can do for business.

Chris Vuillaume: Yes, and beyond the unified communication, instant communication and video conferencing, there's a lot of kind of advantage of going to cloud and just two examples to illustrate, you know, the kind of new applications that we can see coming from the cloud.

And one of them is the disaster recovery, I call it, or business continuity plan and everybody remember about 9/11 and one of the big issue there was also the communication among the agencies and among basically people and the agencies, to really – during this disaster.

And a lot of customers, a lot of companies, are realize after that event that have not been prepared and they have never really thought about, you know, what if, you know, there's a problem with the office.



What if there's a problem with, you know, electricity or any big damage? What are we going to do? How are we going to really make our business, you know, minimizing the impact for the business?

So, what cloud is offering—and like we do at UniVoIP—offer that solution is business continuity plan. So, basically is we sit down with the customer and lay out the scenario. If there is a major incident, what you want to do with your phone calls? You know, if people are calling the main number of your company during a natural disaster, or big event, it can be a medium or large event, what is going to happen with the phone calls?

So, basically we look at that. We interview the customer. We put that rules and process into a tool, you know, which is basically for routing the calls in case of an event. So, we basically turn—you can turn—on a business continuity plan and you can see on the screen here, you know, using just an iPhone, Android or tablet, as long as you have Internet access, you can basically start the override; basically all the process that you have store into, you know, the what-if scenario, will be started, will be enabled. So, now maybe you're—all the phone calls coming on the main number will reroute to an automated attendant and prompt you different choices than the normal choice you had during the normal business situation.

So, you can turn it on and if you have what's called the privilege of doing it, that's coming because if the cloud is up and running, you know, most of the cloud vendor offer now the geographical redundancy, so even if there's a major problem happening on East Coast, you have your West Coast, for example, data center up and running, so that kind of disaster recovery plan, business continuity plan, will still be live.

So, that's something that was not even, you know, in the, in PBX or in communication system when you having the prem-based. Now the cloud is offering something like that, very, very interesting. Most of the cloud vendor offer that, that kind of business continuity plan like we do at UniVoIP.

Another example is drastically simplifying the management. In the same way that you can, as I mentioned before, you don't install any software. You know, now we, you give to the IT people, the full



control of the virtualized in-the-cloud communication solution. So, you can really, the IT people, can really add users, remove users, change permission of the users, add a branch office or remote location with a single click on the web browser.

So, it's very, very important with drastically simplified and fast turnaround for doing changes. That's a major change (inaudible) the cloud. Again, the solution, as long as you have Internet access and you have the right permission, you can basically manage a (inaudible) solution across all the branch office from a single interface on the web portal, or the tablet or PC or even your iPhone. So, very, very big change for and putting the advantage on the cloud for managing your user, your application and features. Celine, I think that's basically finishing our call.

Celine Akrey: Yes. (Inaudible), first, I want to thank you both, Chris and Larry, for developing the voice over IP topics that we outlined in the agenda. Also, clarifying some of the myths that we often run into in the industry. We have received a few questions. Actually, there are quite a few there. I will consolidate them and put them – if you're interested, I would send you a copy and you can contact us and the information here, which is UniVoIP.com., [www.UniVoIP.com](http://www.UniVoIP.com). The phone number is 855-864-8647.

But I would like to, if Chris, would you like to take one (inaudible) here?

Chris Vuillaume: Yes, of course. Yes, of course.

Celine Akrey: Yes. One that came in quite a few times was, "Consumers are wondering if we offer installation on-site and if so, if we're responsible for installing it, what is the set-up time?"

Chris Vuillaume: Well, it is, as I mentioned before, your cloud is really about activation and training. It's no longer installation of software and putting together hardware together. So, cloud is offering capability to basically have the customer almost anywhere, as long as they have connection and activation of the service is pretty instant. The challenge is more about the training for the users, the training for the IT people to administer the system and sometimes requires some, you know, training on-site. So, at UniVoIP, we most of the time, we go on-site to do the installation.



Some cloud vendor offer basically over the phone, remote assistance and the typical timeframe is a couple of days. It can be complex if you really put a complete new call center in-place, but for a basic communication system with unified communication, it's typically a couple of days, as long as the customer has a good understanding about their basically profile of users and what they want to do with the calls, is very, very quick. So, it's definitely days versus probably weeks and months comparing with traditional PBX systems.

Celine Akrey: Okay, great. Thank you very much, Chris. I have one or two minutes. Perhaps we can take another question, which is what is the estimated cost saving from migrating to voice over IP for a smaller, medium business of approximately 30 employees. Larry, would you like to take this one?

Larry Hettick: Sure. And being the professional analyst that I am, I will tell you that it depends. It depends on what features you want, on what kind of vendor you select, whether you select a premise-based or cloud-based system. I will tell you that cloud-based systems tend to be less expensive because there's no capital investments and you have an ongoing budget that you can allow for that and that's part of what makes them attractive.

I will also tell you that the costs probably for training our users are going to be generally a bit higher than they are, if you want to, again, to deploy unified communications. However, you recoup those costs of training the employees because you get better collaboration, you get less time trying to track people down with things like presence and click-to-call and really makes their life simpler. So, a little bit of time and effort upfront in training the employees is well worth it down the road. But the costs will depend absolutely on what kind of features that you get and whether or not you decide to deploy on-premise or in the cloud.

Celine Akrey: Thank you, Larry. Okay, so now we're 30 minutes on the nose. What I will do, first and foremost, I want to thank you, everybody, for joining the call. Also, Larry and Chris, our speakers and the, as showing on your screen, please don't hesitate to contact UniVoIP for any information you may require, live tour or a demo, we will be happy to assist. Thank you, everybody. Have a great day.



The End