Strategic Solutions series

Presents:

Cloud Telephony:
Not Just Another **Buzzword**

aculabcloud
A true cloud telephony platform

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Cloud Telephony: Not Just Another Buzzword

Turning to the cloud for unified communications, PBX solutions or hosted VoIP can give businesses access to sophisticated communications infrastructure. In fact, small and medium-sized businesses are adopting cloud-based services at rates twice as fast as larger corporations, primarily because they aren't as risk-averse or don't have be concerned about integration with legacy systems. While the best-known service is cloud computing, cloud telephony is built on the same foundation – a vendor provides a product or service in a virtual environment.

With so many available options on the market today, as Aculab's Faye McClenahan suggests, businesses want to have their cake, and eat it, too. In a recent interview with Cloud Computing, McClenahan explains how cloud telephony is levelling the communications landscape for SMBs and enterprises, allowing them to achieve new operational efficiencies and harness this great competitive equalizer. Our full exchange follows:

EH: What telephony challenges do enterprises and SMBs face, and how are solution providers stepping up to the plate?

FM: Whether you are talking telephony, IT services, utilities or other business resources, I think enterprises are looking to achieve three things: to reduce costs, while continuing to deploy the best technology and all without writing off their existing infrastructure investment. They want to have their cake and eat it.

In today's economic climate, that desire on behalf of enterprises and SMBs provides all the more reason for solution providers to explore new ways in which they can reduce the underlying cost of their service, be it hosted or premise-based. These cost reductions could come in the form of flexibility, perhaps allowing enterprises to dynamically increase/decrease capacity as desired, in addition to allowing new payment models (i.e., OPEX rather than CAPEX, as illustrated on page 29).

EH: We hear a lot about cloud computing and cloud-based services – what does cloud computing mean to telecommunications?

FM: Where telecoms stand out against other cloud-based services is the fact that the concept of "cloud" originates from telecommunications. The terminology actually derives from the image used to represent the Public Switched Telephone Network (PSTN) – the cloud. In the case of cloud-based telephony, the service is offered on a pay-per-minute basis and users can enjoy such a capability without having to own and manage the infrastructure. Somebody else does that for them and the complicated technology part "just happens" – in the cloud.

That being said, cloud computing, as a movement, has injected new life into the industry. It has made it quicker, easier and more cost-effective for service providers to develop and produce an application. It has also made a greater number of applications available to SMBs, which due to cost were once only available to enterprises.

A true cloud telephony platform should maintain the promise of cloud computing: It should remove the need for users to purchase or maintain specialist telephony resources or gateways and it should

Faye McClenahan, Aculab Cloud

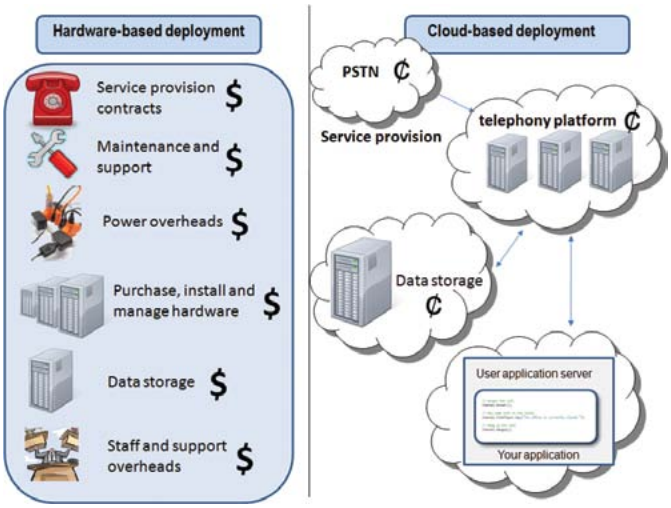
allow you to invest in your application as your traffic volumes increase. It should enable you to pay as you go and scale seamlessly, up or down, when you have the need.

One of the most provocative or disruptive elements that cloud-based telephony offerings have brought to the market is that telephony application development is no longer a black art, with only a limited number of developers having the skills required to build applications. Now, thanks to the provision of APIs in high-level programming languages, just about any developer can get to grips with building IVRs or voicemail – and in days, rather than months.

EH: What is telephony platform-as-a-service (PaaS) and what do you need to run a cloud-based telephony application? What are the main points to consider when looking to run a cloud-based telephony software-as-a-service?

FM: A telephony PaaS allows you to write your own telephony application and connect it to the PSTN or even directly to the end user via SIP, without having to purchase

The CAPEX of a hardware-based platform versus the OPEX of a cloud-based platform.



telephony cards or software. You can access "tools" and sample code to help you write and deploy an application, based on technology owned and managed by someone else. What are the main points to consider when looking to run a cloud-based telephony software-as-a-service? To run a cloud-based telephony software-as-a-service, there are five things to consider: the application; the application server; telephony resources (Telephony PaaS); deployment options; connection to the PSTN or directly to the end customer; and data.

The telephony application is going to add telephony functionality to your workflow processes and, in telephony terms, the equivalent is call flow. That is achieved by means of your application controlling the telephony resources via a menu of structured commands – an API. That, in turn, results in the call logic that is executed by the software program that makes, takes or interacts with a call (e.g., plays or records a message; presents a caller menu; transfers a call; creates a conference; or records a call).

The primary function of any cloud-based telephony platform is to provide you with the resources to make an outbound call, transfer a call to an agent and record messages, for example, negating the need to buy specialist technology. Your cloud vendor's purpose in life is to make available to you – in the cloud and on demand – a virtually inexhaustible bank of resources for your application to use.

It's only when you're ready to deploy your application that you need to really invest. At that point, you will need to pay for inbound numbers and to be able to make outbound calls. From that moment on, you can make and/or take as many calls as you need, and you don't have to plan ahead for peaks. The cloud platform will scale automatically, depending on the traffic passing through, and it will handle innumerable, concurrent calls. You pay for what you use, rather than pay for hardware and software or specialist technology.

When it comes to calls breaking out to the PSTN or when you have to receive calls originating in the PSTN, the cloud-based telephony platform vendor also manages this functionality. The cloud provider should have taken care of all necessary interconnect arrangements with its various service provider partners and any break out to the PSTN will be through those partners' existing, established gateways.

And finally… data or, more specifically, data security, can be a very sensitive point. In truth, there is no reason why data stored on premise is any more secure than that in the cloud. Nevertheless, you (or your customers) may not be willing to place any or all of your data in the cloud at any time, if at all (although it's important to add that you could, if you so wished). If your application is data driven, your data can remain on premise; a connection simply needs to be made between it and your application. Most likely, that will be a pre-existing connection, which means you won't have to add any costly, additional interfaces.

EH: Aculab has long been known as a respected telephony vendor -- how is the company redefining itself and reinventing its offerings?

FM: Aculab has been in the computer telephony business for over 20 years now and in many ways, what we are doing now is the same as we have always done – develop software. True, we are a manufacturer of computer telephony boards and software. However, the strength of these boards stems from the wealth of telephony resources available to run on them. These resources have been developed and enhanced over many years; tried and tested within a range of telephony applications. All Aculab has sought to do and will continue to do, is increase the platform deployment options for its software. Whether it's delivered on a card, on a host-based server processor, or packaged as a Telephony PaaS, Aculab provides an exemplary, professional solution.

EH: Is cloud communications primarily an SMB service? How can enterprises benefit equally?

FM: Why can't all businesses benefit? In the mainstream, SMBs will benefit by being able to make use of applications that they simply wouldn't have been able to afford in the past. For enterprises, it's slightly different. They will benefit because, rather than having to buy a solution and install/maintain it in-house, they can simply consume a service.

EH: In addition to cost-savings and flexibility, what are the main benefits of Aculab cloud and a cloud telephony platform in general?

FM: I would argue that every benefit has some kind of cost saving associated with it. I guess it all depends on how broad a definition you are using. For example, cloud actually allows some SMBs and enterprises to take advantage of applications they simply wouldn't have been able to afford in the past as cloud makes it affordable for more enterprises to 'invest' in new/different types of technologies or applications.

Aculab Cloud and its service can spark innovation that would have been too expensive to develop in the past. It's also less hassle… you don't own anything, you just consume a service. Not having responsibility for purchasing, installing, managing and supporting equipment can be a good thing.

EH: Is an on-premise PBX obsolete? Looking ahead, how do you envision cloud telephony evolving over the next 12 months?

FM: The PBX is already obsolete; folks just won't admit it. Okay, it's not obsolete in that there are millions of them in use, and folks even buy new ones, albeit they are IP-PBXs, but the PBX is obsolete in the sense that it is an obsolete concept – the need to have a physical box sitting in a corner on site at an office. Heck even the offices don't exist any more when people work from home. The new concept is to make all that functionality available as a cloud-based service.