Cloud Unified Communications versus On-Premise: Key Benefits Comparison

Executive Summary

The age of Unified Communications (UC) is upon us. As companies struggle to stay competitive in a highly globalized economic environment, they look for ways to encourage employees to communicate and collaborate from any device, via any medium, from any time and place. The umbrella term for the many ways in which telecommunications companies are striving to create that reality is "Unified Communications" -- an integrated set of voice, text, video, and Web collaboration applications that allow for a massive expansion of a company's communications abilities.

Within the Unified Communications arena, there are several competing concepts fighting for dominance over the field. With IT and telecommunications executives obligated to prove a clear Return On Investment (ROI) and thus justify investment in this new technology, the drive to maximize the potential of UC is powerful. The first goal of any UC platform is that it be cost-effective and utilitarian. Only after that has been firmly established can the other goals – higher sales, lower support costs, and improved productivity -- be addressed.

The two major branches of UC currently in place are startlingly similar in many respects and extraordinarily different in others. Both offer most of the same tools: Voice over Internet Protocol telephony service, audio and video conferencing, and instant messaging on the basic (cost-effective and utilitarian) level, and integrated inboxes, telepresence, and FindMe/FollowMe for improving productivity and enhancing revenue.

The first branch of Unified Communications is on-premise UC. On-premise UC is exactly what it sounds like -- a system of hardware and software elements that exists within the physical space of your office. On-premise UC involves physical installation, ongoing maintenance, and repair of devices and programs that must be integrated into your existing network.

The second branch of UC is cloud-based UC. Cloud-based UC exist 'out there' in the form of Web-based Software-as-a-Service (SaaS) applications that take up no physical space within your office. In contrast to on- premise UC, cloud-based UC require no physical installation and are maintained and repaired by the vendor at the server end. Because the service is Web-based, it can easily be accessed from any computer with an Internet connection.

What follows is a more detailed overview of cloud-based and on-premise Unified Communications solutions, an itemized breakdown of the advantages of each, and an introduction to PanTerra Networks' "futureproof" cloud- based Unified Communications platform. When you have finished, you will understand why the future of Unified Communications lies in the cloud.

Cloud-Based Unified Communications Overview

Cloud-Based Computing

Cloud-based computing is a relatively new paradigm in which a third-party pool of systems are connected by networks -- usually, but not necessarily, the Internet -- and provide infrastructure, applications, and platforms as a service, all of which is dynamically scalable.

The cost of computation, content storage, and application hosting and delivery is significantly reduced by the reusable, trans-organizational nature of the cloud -- in other words, because the SaaS is offered to multiple clients at once from a single source and from a single code base, the cost to each of those clients is reduced.

Simply put, cloud-based computing means that the applications you use aren't hosted on a machine you own, and they aren't

restricted to use by your company. In addition to the cost effects, the net effect of using the cloud for your applications is that you can quickly log in to your SaaS servers and have your secure personal files, programs, and even settings exactly as you left from, from any Internet-enabled computer.

Unified Communications in the Cloud

Unified Communications is an umbrella term for a number of different tools that work together to enable your business to translate quickly between and conference easily in multiple formats (text, video, speech). In addition, UC systems allow for rapid communication between all types of devices, from desktop computers to laptops to smartphones and personal data assistants and even tablets.

With cloud-based Unified Communications, the goal is to bring all forms of communication -- voice mail, email, fax, and even text and instant messaging -- together into a single 'inbox' that is accessible from any device. For example, if your device doesn't have a speaker, or it would be inappropriate to use it, the UC platform offers a transcription service that can translate a voicemail into text format.

There are several powerful services that all inexorably lead to that single goal: top-tier cloud-based Unified Communications platforms offer call center services, VoIP telephony services, real-time presence tracking, conferencing services, and dozens of other tools, each of which works together to make your employees' communication tools as universally available and as universally applicable as possible.

On-Premise Multiple Vendor Solution Overview

On-Premise Computing

On-premise computing is, in almost every way, 'business as normal' -- or rather, it used to be. Today, however, even on-premise computing isn't as cut and dried as it sounds. In addition to the traditional route of purchasing your equipment, installing it yourself, repairing it yourself, upgrading it yourself, and essentially being entirely responsible for everything that happens with the system, modern on-premise computing also offers the hosted option.

Hosted on-premise computing is a setup in which, for each of your various systems, the vendor for that system installs, maintains, repairs, and upgrades your hardware and software for you. All you do is use the system. The upside is that you don't have to hire an expert to be on staff to keep track of the system -- the downside is that hosted on premise systems can be just as expensive, you still need to maintain a data center, and you have a bit less control over the system as a whole.

Compared to cloud-based systems, on-premise computing in general offers the potential for greater control over the system, but also significantly greater upfront cost, less long-term flexibility, and a good chance that your entire investment will be rendered moot (sunk costs) if the technology shifts in the near future -- not an unlikely scenario given the volatility of the tech sector.

On-Premise Multi-Vendor Unified Communications

Unified Communications tools themselves aren't terribly different between on-premise and cloud-based UC. On- premise UC platforms share the same basic goals of bringing all of your communications to a single point of contact while offering a host of powerful background and support tools to make that single point as versatile as possible.

In order for a UC system to be truly 'unified', it must offer interoperability -- in other words, it must be able to take into account

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all of the potential devices that your business might want to aggregate into the system. Because every passing quarter results in the release not just of new devices, but of new categories of devices (witness the blossoming of the iPad, kindle, and other such devices in the last year), on-premise UC must choose between sacrificing the ability to support recent devices or paying for regular updates and/or additions. The problem of interoperability also makes single-vendor on-premise UC a much less powerful solution than a multi- vendor route.

The single most critical element of the on-premise UC is the Total Cost of Ownership (TCO). The TCO of an on- premise UC platform is wildly variable based on the number of sites you need to install at and how physically distant they are. A single-site business that doesn't plan to support remote workers may end up with a similar overall TCO (versus the cloud) by taking an on-site approach. Likewise, a multi-site business -- or a business that intends to offer work-from-home benefits -- will generally benefit from a reduced TCO by going with a cloud- based solution.

Key Benefits Comparison

Cloud-UC offers significant benefits over an on-premise managed (on premise hosting) or unmanaged solution. PanTerra surveys indicate significant bottom-line improvement in three areas:

1. Driving higher sales

2. Reducing support costs

3. Improved productivity

In driving higher sales, cloud-based UC brings a 15% improvement, due to processing efficiencies, better customer service and greater uptime. In an environment with $1M in monthly sales for example, that would yield an additional $150,000 a month, or $1.8 million per year.

The PanTerra study further showed that cloud-UC reduces phone support costs by as much as 66%, by incorporating multiple channels for support, driving easier and more efficient contact, and making better use of existing support staff.

In productivity improvement, the Panterra study showed that use of Cloud-UC can save 30 minutes per day, which again in an enterprise environment with hundreds, or thousands of employees, can yield a multi-million dollar savings.

Competitiveness/Responsiveness

The world of telecommunications is even more volatile than the rest of the tech sector, with a significant number of new communications technologies competing for the attention of businesses and citizens around the world. Not just new technologies, but entirely new concepts of how to use technology are forcing the telecom sector to continually re-evaluate the ways that they can use existing resources and how to most effectively add new capacities without requiring an entirely new set of hardware and software.

Obviously, on-premise Unified Communications systems have a difficult time, when the technology changes profoundly around them, avoiding the hardware-replacement problem. Even something as relatively simple as adding a wireless aspect to your communications means adding a few new bits of hardware to your system, and each new bit might mean a new vendor, which only furthers complications.

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It is in this arena that the cloud-based UC solutions have an immediate and powerful advantage over on-site Unified Communications platforms. Because the cloud-based system is maintained by the vendor at a remote server, all upgrades are performed invisibly and without interruption to your service -- and at no additional cost to you. Compared to the cost and hassle of continuously upgrading an on-premise UC platform, the cloud holds the clear advantage in terms of keeping you automatically on the cutting edge.

Obsolescence cost

Obsolescence cost refers to the likelihood that your Unified Communications platform will suddenly become a complete loss because your vendor fails to offer solutions to keep up with the changing telecom environment -- or at least, fails to offer them within a cost range that you find acceptable. In that situation, the only available options are to allow your company to fall behind the curve, or to completely reinvest in a new system from a new vendor. Especially for multi-site businesses, a complete on-site UC overhaul can be staggeringly expensive.

Not only does such a business have to spend money to rip out their old systems, but the capital costs -- discussed next -- involved in setting up a new system are noteworthy in their own right, making an obsolete on- premise UC platform essentially twice as expensive.

Compare that to the cloud: with a SaaS solution, the chance of your UC platform becoming obsolescent is virtually nonexistent unless your vendor goes completely out of business -- and even if that happens, changing SaaS vendors is much less of a hassle than swapping hardware and wiring out across all of your business sites. In a sense, the cloud makes obsolescence "obsolete".

Capital Costs

Capital costs -- that is, the amount of money required to get your Unified Communications system from zero to fully-functional -- is a huge part of the TOC of any UC system. An on-premise UC platform requires capital investment in a significant amount of hardware as well as the manpower to wire that hardware into your existing system -- not to mention the software side, which must be installed and properly integrated as well.

Compare this to the cloud-based system, in which the capital costs are rarely more than the first of a series of monthly or annual fees for access to the cloud service, and the advantage of the cloud in terms of startup costs becomes overwhelmingly clear.

When all of your tools are available from any machine by simply logging into your business' cloud-space, the total setup time is reduced to the amount of time it takes to establish your inbox and fix your settings -- and the total cost is reduced to paying your employees for the time it takes to finish that simple set of tasks (plus the first subscription cost, of course.) The capital cost has already been absorbed not by your company, but by the vendor, who in turn ameliorates it by offering the same service on the same machine to several different customers. The process is much more efficient in terms of total resources necessary than having each of those businesses purchase and install their own systems to accomplish the same goal.

Ongoing operating expenses

It would be easy to assume that, with significantly reduced startup costs, it must necessarily follow that the cloud service of the cloud-based UC system would have higher ongoing operating expenses. That assumption, however, would be incorrect. Hosted on-premise systems often have prices similar to cloud-based systems in the first place, but even entirely self-owned and self-controlled on-premise systems rarely offer significant savings over the cloud.

It's true that self-owned on-premise Unified Communications solutions don't have the recurring fees that a cloud service (or a hosted on-premise service) charges -- but there are many costs that run below the surface of an on-premise UC platform, and those costs can easily outweigh, in the long run, the fees of a cloud-based system. On-premise systems cost money to install, to setup, to operate, to maintain, to upgrade, and to deploy. Only two of those events are one-time events. The operation costs of an on-premise (non-hosted) system may appear to be limited to electricity at first blush, but when you take into account the necessity of staffing someone with the expertise necessary to keep the system running, they can be notably greater than anticipated. Of course, the upgrade and deployment costs are also quite noteworthy in their own right as well. Particularly if you have a multi-site business, on-premise UC's ongoing operating expenses can easily outpace the subscription fee of a cloud-based UC platform.

IT complexity

Finally, we turn to the specifics of that upgrading and deployment -- the single most important aspect of Unified Communications that separates the nimble cloud-based systems from the on-premise behemoths. IT complexity is actually a somewhat complicated subject that can be boiled down into a simple idea: the more bits and pieces your IT system -- including your telecommunications system -- has, the more likely it is to, at some point, experience a catastrophic failure.

Suffice it to say, the multi-vendor nature of most modern on-premise Unified Communications platforms makes an on-premise solution significantly more complex, in terms of overall parts, than a cloud-based system. The rule, as established by seminal software design engineer Robert Glass, is that a 25% increase in functionality leads to a 100% increase in complexity. That notion applies fully to an on-premise UC solution, but is neatly avoided by a cloud-based platform.

The way that the cloud helps to avoid the problem of emergent complexity is as simple as it is profound: the cloud entirely removes the need for your business to do anything whatsoever to the Unified Communications platform. Because the platform is singular, entirely self-contained and not touched by several hands from several vendors, the level of complexity is much more easily controllable than on a multi-vendor on-premise solution. Simplicity is the essence of the cloud, and that rule doesn't apply anywhere as clearly as it does when addressing the unique field of Unified Communications.

PanTerra Networks: Futureproof Cloud-based Unified Communications

PanTerra Networks cloud-based Unified Communications platforms, then, offer a profoundly different UC experience from traditional on-premise systems. By delivering our solutions via the cloud over a simple Internet connection, we eliminate the need for on-premise hardware or costly analog phone lines. Because we upgrade and maintain our system on our side of the cloud, there will never be any concern about obsolescence or equipment breakdowns. Any SIP phone or Internet browser can access your entire UC platform online, eliminating even the basic need to install and update client software. With almost no capital costs and reduced ongoing costs, PanTerra Networks' Unified Communications platform reduces communications costs in all stages of use.

Responsiveness

Today's customers expect your organization to be connected -- and today's workers expect to be able to connect with one another easily despite a staggering variety of communication media available to them. PanTerra Networks' UC solution brings all of those media together under one universally-available umbrella, allowing your business to respond -- internally as well as to vendors, consultants, and most importantly clients.

Security

When you use PanTerra, all of your communications are stored off-site -- in the cloud, as it were. That means that even in the event of the worst possible disaster at your place of business, your messages will remain intact and available from any web browser. At the same time, PanTerra understands the value of a familiar interface, and we've worked hard to ensure that our platform interfaces transparently with common communications programs such as Outlook and SalesForce -- giving communications through those programs the same level of security.

Integration

With seamless voice-to-text, text-to-voice, and click-to-call and click-to-conference functions from email, instant

message, and even fax, PanTerra Networks UC platforms bring a new level of unity to the concept of Unified Communications -- all told, more than 11 distinct channels of communication are seamlessly integrated into a single point-of-contact that is accessible from virtually any device. Teamed with real-time presence tracking that intelligently forwards messages to the most appropriate device for a given worker at a given time, our cloud- based system makes getting -- and sending -- messages as transparent and intuitive as possible.

Futureproof Communications

The biggest danger in investing in any single IT system, telecommunications or otherwise, is that the system will eventually become a victim of progress -- but that is a guaranteed impossibility when you work with PanTerra Networks. PanTerra works constantly to keep abreast of the latest developments in telecommunications, and we are always upgrading our cloud-based Unified Communications solutions to keep them firmly with the times. There is no on-premise equivalent of the complete futureproof offered by PanTerra.

PanTerra Networks' cloud-based Unified Communications solution reduces cost, improves responsiveness to your clients, and secures your business against both present disaster and the calamity of potential future ones. Our clients join us knowing that we will be their partner in improving revenues and cutting communications costs for life. That's the power of futureproof communications, the power of the cloud -- and the power of PanTerra.

About PanTerra Networks

PanTerra Networks, Inc. delivers the most comprehensive cloud-based unified communications service through its Streams solution. Streams makes companies more competitive by making them more responsive and includes all services and unlimited usage for unified business communications including voice, unified messaging, fax, video, instant messaging, email and calendaring, file transfer, mobile text messaging and presence integrated into its Unified Command Center (UCC). Streams also includes group communications including desk sharing, web conferencing, IM conferencing, and audio conferencing. Streams also integrates with Outlook and Salesforce as well as other commonly used CRMs through its included application programmers interface (API) enabling communication-enabled business process (CEBP) environments to flourish.

Streams stores all your communications in the cloud, enhancing security and allowing you to access them with just an Internet connection and browser. The company is headquartered in Santa Clara, California, with Research and Development based in Hyderabad, India.

For more information, please visit **http://www.panterranetworks.com**, call us at +1 408.702.2200 or email us at **info@panterranetworks.com**.