CommuniGate Systems explains how it enables network operators to deliver unified communications in the software-as-a-service model to small and medium enterprises

## How carriers can give SMEs the means to compete





Users can access voice, video, messaging and other services via any internet browser.

Most small and medium enterprises — SMEs — have so far been denied the benefits of full unified communications services, but know they must now join the party if they are to remain competitive.

This provides operators with a great opportunity to seize the moment and offer the SME market UC services in a package that works for both sides, avoiding the costs and complexities of on-premises client-server based solutions when most SMEs have no IT department at all.

Many large enterprises have already begun deployment of complex UC solutions, bringing together calendaring, email, mobile communications, and voice over IP, along with

video conferencing or presence-based applications, but these are based on multiple applications such as Microsoft Exchange 2007, MS OCS 2007, MS SQL, MS Active Directory, MS, Nortel VoIP or IBM's suite of applications and partners to complete a UC solution.

Such UC implementations require a massive upfront cost for licensing and integration between different components, such as PBXs, VoIP and client technologies which might mean three to five applications on the desktop alone.

These suites of applications require maintenance of large numbers of client and server components. This can be realistically accomplished only by a large IT department comprising multiple skills.

Smaller companies with up to 500 employees may still have a significant number of clients and servers to look after, but will usually lack the internal IT resources to cope with the integration and management complexities involved with UC. The result is that while many SMEs are well aware of the benefits UC can bring, they are struggling to work out how to deploy it cost effectively.

Fortunately the best way forward for SME corporations has become clear: it is to access UC as software as a service. The SaaS model scores heavily on all fronts, being easier to deploy, more reliable, and more manageable for the SME customer, while allowing future expansion in both user numbers and applications.

This last point is important because UC is constantly evolving, and is likely to deliver a range of new functions over the next few years as mobile bandwidth continues to expand and become more ubiquitous, coupled with the evolving sophistication of portable devices. Over the next few years SMEs will no longer be at the lower end of the technology spectrum compared to large enterprises in terms of messaging and communications.

As UC services become fully distributed and affordable for the SME sector, companies will be able to perform better and operate in a virtual fashion less bound to fixed offices. This will create new opportunities for SMEs to build regional or global operations that until recently were restricted to large enterprises.

Carriers and service providers in turn need to position themselves now to take advantage of these opportunities, especially as SMEs represent their best chance to exploit the broadband bandwidth that they deliver widely but can no longer make much money from directly.

The delivery of bits over fixed line services has become commoditised, with many operators selling bandwidth at below cost price to attract customers, as is happening in France, where competition for DSL based services is particularly intense.

Even mobile data services, which have been a cash cow for operators in recent years, are going the same way, with "all you can eat" packages incorporating both voice and data and spanning the globe emerging over the next few years.

With telecom tariffs for business and residential packages likely to fall below the levels of current broadband internet subscriptions, the big question for operators will be how to make up the lost revenues. Consumers may be prepared to pay for TV and digital entertainment, but not for messaging and communications services, which they will obtain virtually for nothing from the likes of Google and Skype, financed by advertising or a model below the market rate.

SMEs however could fill the breach network operators are facing, for many will be prepared to pay €0 a month or more per user for robust UC SaaS services that deliver all the features they require.

The next question for operators is how best to provision these SaaS services, with several key requirements. Firstly the platform must be flexible and able

to deliver the UC applications SMEs need, which revolve around presence, availability, and seamless integration between messaging formats, incorporating scheduling and calendaring with the voice services.

For most SMEs, presence is still conspicuous by its absence, with little ability yet to determine the availability of people to communicate.

For example, within a law firm, a busy partner may be talking on a mobile while having several IM sessions open. The last thing this partner wants is a call on a fixed line phone even if this is available, unless the person calling is senior or has some higher priority. In this case an intelligent UC system might divert the caller to a colleague according to the priority, or alternatively the caller can be presented options to barge in.

UC systems can take presence information and decide what to use for alerts, such as an SMS or perhaps a display on a computer or an IPTV set. Such capabilities would be highly valuable for many SMEs.

The other primary requirement for an SaaS platform is efficient scalability, along with support for virtualization or multi-tenancy, which is the ability to provide many customers with dedicated secure services and delegated rights within a single system image for the main administration.

On these fronts all is not always quite as it seems. Some service providers do offer hosted SaaS email and UC services based on Exchange, Microsoft OCS, and VoIP systems from maybe Nortel or Cisco for example, and these services indeed do scale, and can support multiple customers when you throw hardware and money at it.

But this scalability comes at a massive price for SaaS providers, for Exchange or Notes are best suited to single large enterprises with systems on the premises involving complex integration requirements.

Adding additional customers to such an infrastructure is expensive in terms of hardware and management resources, and unlikely to be cost effective for SaaS services aimed at SMEs. Quite simply the cost of scaling may exceed the incremental revenues.

For this reason a growing number of carriers are turning to CommuniGate Systems, which delivers proven efficient scalability with its CommuniGate Pro Mobile Unified Communications platform.

Several key aspects separate CommuniGate Pro from other platforms, starting with its completely agnostic support for all the core system and media components of a UC ecosystem, including IP PBXs, VoIP, email, calendaring, collaboration, presence, IM, voicemail, conferencing, and mobility.

CommuniGate Pro also runs on Solaris and Linux, delivering the higher density and performance that network operators need compared to enterprise class platforms like Windows.

Client support for CommuniGate Pro spans the spectrum of Windows, Linux and Mac and includes native support for Apple OS X clients such as iCAL and Apple Mail, which is highly significant given the mass migration occurring from Microsoft to Apple PCs and servers.

This migration is particularly prevalent in the US, where one in three laptops sold are now Macs.

Although this performance is not matched in other countries, there are signs worldwide that the power of its brand, combined with disenchantment with the cost and poor robustness of some Microsoft platforms, is driving customers Apple's way.

When it comes to features, CommuniGate Pro can actually offer more than the likes of IBM, Microsoft or Cisco, especially when it comes to the ability to develop new applications on the platform for emerging value added services limited in scope only by the imagination.

There is one very powerful feature that does set CommuniGate Pro apart — and that is very interesting for the SaaS provider: the Pronto! Flash-based UC Client.

This is the only genuine Web 2.0 client capable of delivering carrier-grade UC services as well as media-like IPTV and video on demand.

Pronto! really does deliver on the promise of Web 2.0, by allowing users to access their voice, video, groupware, messaging and rich media services from any internet browser anywhere in the world, using a single managed account and one interface.

In fact we have now added support for digital entertainment with Pronto! 2.0, which can include movies as well as work-related content such as training videos and speeches from CEOs to employees.

CommuniGate Pronto! is based on Adobe Flash and Adobe Flex technology, which means that it can deliver UC services with the same look and feel across any combination of operating system and browser.

It is clear then that Pronto! 2.0 is much more than a feature, for it underpins our ability to provide a UC SaaS platform that is scalable both in being able to support fast growing numbers of customers and to add additional functions.

Applications developed both by CommuniGate Systems and third parties can be snapped into Pronto! as modules, just as new applications can be plugged into desktop operating systems. Pronto! delivers new value added services and applications by Web 2.0 making it ideal for SaaS providers.

Pronto! is essential for successful delivery of UC via a SaaS model, since it avoids the need to install software on PCs or other devices. This removes a huge support burden for ISPs and network operators, which would otherwise require dedicated call centres to support customers, with the inevitable problems arising from client misconfiguration and incompatibilities.

The unique capabilities of Pronto! have been acknowledged by analysts as well as major carriers around the world. A major endorsement has come from BT, whose lead business and technical consultant Simon Edwards said that it "gives our people, and our customers, powerful tools to do their job with a huge competitive advantage".

Such endorsements are echoed for the CommuniGate Pro platform as a whole, which has also enjoyed positive reviews from testing companies. According to CT Labs, which specialises in converged communications systems, CommuniGate Pro "sets the bar for massive scalability and quality of service for large scale deployments of IMS, VoIP applications and presence services".

So while, apart from Pronto!, we make no claim to have any unique magic ingredient, we do strongly believe, backed up by numerous endorsements, that we offer the best overall platform for delivering UC via a SaaS model to SMEs from the desktop to the mobile.