

# Hosted *telephony*

With many new entrants coming in to the hosted telephony market Comms Business Magazine takes a look at the investments required by suppliers, the features offered and the market outlook for resellers.

Hosted technologies offer businesses extensive opportunity to improve flexibility, minimise capital expenditure and maximise value from their networks. With the spread of voice-ready IP networking, the rise of Cloud Computing and Software as a Service, the traditional premise-based PBX could be displaced by hosted services delivering an integrated cross-site company PBX as another hosted application.

The business benefits are numerous for SMEs and blue-chip corporations alike. Unlike legacy solutions, hosted technology doesn't require capital investment, set up is much faster, and it removes the burden of having to house equipment on site. For multi-site businesses it offers the ultimate flexibility and it can be easily self managed enabling extensions and locations to be added or moved to respond to changing business needs and market demands.

A hosted system can act seamlessly across all sites offering a standard user experience irrespective of location and the ability to route calls to available staff, again irrespective of location. And because hosted solutions are held in a 'cloud' in the network, they are fully future-proofed and will never become obsolete because functionality is regularly upgraded, meaning further ongoing cost savings for businesses.

Ken Bailey, Head of Product Management for VoIP, PBX and Mobile, Opal, comments, "Set to shake up the reseller model, Ovum estimated hosted IP PBXs currently support 6% of the total market, predicting this will increase to 15% (2.1M) by 2014. Hosted PBX enables partners to offer total communications solutions to their customers and the revenue opportunities are huge forecast at £144M in 2010 and predicted to rise to £330M by 2014.

"Unlike Hosted IP Centrex, which provides standard functionality to all customers in the same way, Hosted PBX empowers resellers and their customers by giving them the software to manage a host of converged solutions to improve their business



Ken Bailey of Opal

practices, offering complete flexibility to adapt the individual offering to meet the end-users needs. Each implementation is unique to the customer and can develop at a pace to suit the customer's business needs. This in turn offers resellers a secure and ongoing revenue stream with long-term, high value contracts. The likelihood of a customer taking their business to a competitor is also reduced as the reseller will have ownership of a larger share of the customer's telecoms spend, giving the reseller even more opportunity to create customer loyalty through delivering a complete solution tailored to their needs."

There are many solutions out there with different stated benefits and support models for channel, so it can be a confusing picture to make sense of. Crucially, if Hosted solutions are going to support business-critical functions and processes, they must be backed by a resilient supplier with a UK-wide reach, so resellers need to look for a partner who has all these qualities.

We asked all the key UK hosted telephony suppliers the following eight questions:

1. How much have you really invested in infrastructure? Does it matter?
2. Do you do the telephony switching yourself or is it outsourced – and does it matter?
3. Is your platform redundant and resilient and what do buyers need to look for – dual data centres, not located in same area, resilient links etc?
4. What sort of DDI rerouting resilience can you offer against network failure?
5. What guarantee of regular upgrades is there? Some systems are on individual servers and so they may upgrade one client without upgrading all clients, very frustrating if users bought in to an ever-green service.
6. Will you be able to support future developments such as the growth of communities with free/low cost telephony services between clients while maintaining secure tenancies?
7. Is there a wide choice of applications?
8. What sort of feature roadmap is provided?

Space in the magazine restricts us to report on only a fraction of the replies we received and we'll be getting the whole report on our web site. So for this article we'll be focussing on investments in infrastructure, future developments and application availability - questions 1, 6 and 7.

How much have you really invested in infrastructure? Does it matter?

Lesley Hansen of Teleware says it is not a matter of the one that spends more has the best but that systems are likely to be reliable and resilient if they are built on high quality infrastructure and will be the more sophisticated system to ensure up time and interoperability as well as ease of change going forward.



Brian O'Sullivan - Voicenet Solutions CTO

“TeleWare use our own software applications so no application investment has been made, although the additional development resource to optimise for use of our applications in a hosted environment is around six man years. In addition our investment in hardware in the data centres is in the region of £1.5M per data centre and we are running three data centres in Thirsk, Heathrow and Docklands.”

Dave Dadds, Managing Director of Vanilla IP, “On the basis that building a Hosted IP network can be compared to building a house in that you can't sell it till it is complete, in many ways the cost of the bricks is not the real question. To roll out a hosted IP network, bring it online and generation profitable revenues needs all the bits of the jigsaw in place. This includes data centres, hardware, third party software, in-house software development, ongoing running costs as they are incurred and the not insignificant costs of salaries to keep it all going. A long answer to a short questions but I would estimate we have spent in the region of £2 to £2.5 million.”

Brian O'Sullivan, CTO at Voicenet

Solutions explains that a hosted telephony service encompasses a very large variation of solutions, from an engineer with a server in a garage running asterisk, to somebody that has invested millions over the course of a lifetime not just installing carrier-grade equipment, but keeping it up to date and doing all of the boring back office tasks that make a service robust.

“If all you can see is a phone on a desk, it is very hard to determine what is behind it. There is a simple tenet of engineering design – everything, at some point will fail: NASA and aircraft design take this to its logical extreme with some systems with seven backups which ‘vote’ on which system should be ‘in charge’. The challenge is to estimate the MTBF (mean time between failures), the impact of that failure and design a solution that fails gracefully. You want this to be seamless to the user. Sometimes the laws of physics mean this isn't possible – but even in those instances you still want to deliver seconds or at worst minutes for failure scenarios – not hours or heaven forbid, days.

“The problem is, redundancy and resilience nearly doubles overheads, so it is a tough decision for a company to make when setting up a service; wouldn't they prefer to spend the money on marketing, and put up with a few single points of failure? It takes real experience and discipline to design these costs in.”

“Infrastructure is hugely important,” states Entanet's Voice Technical Lead, Jon Farmer. “The quality of the voice service is reliant on the underlying infrastructure. After initially being dissatisfied with an early supplier's IP platform, back in 2007 Entanet decided to develop its own platform in house using our team of experienced programmers and VoIP technicians. This strategy gave us complete supplier independence. “In Entanet's case however, that wasn't all. “We've also created our own national and fully resilient next generation network utilising 20 BT 21CN ‘nodes’ and our own fibre backhaul. This has enabled us to provide hosted VoIP services over a highly effective network that allows us to prioritise the voice traffic where necessary or desirable.”

Martin Sims, Managing Director at Basingstoke-based thevoicefactory says there are choices to invest in low end IP-based solutions which can mean low Capex cost but higher Opex costs later on.

“A Service provider has to be a trusted partner to the customer so we believe in only the best-in-breed solutions to limit issues and offer the up-sell capability to your resellers and SAAS integration. Carrier Class Solution from conception to first customer will cost around £700k min based on BroadSoft and Acme Packet SBC.”

Darren Lake, Director at Wavenet, the company that recently acquired Titan Technology, commented, “We have invested heavily in infrastructure and have management tools that allow us to proactively manage both core backbone and end-user connectivity; this allows us to be extremely responsive in the unlikely event of a failure. It is of paramount importance to have these facilities in place when supporting a hosted service otherwise you are ‘shooting blind’ when trying to resolve issues.

“Our platform is totally resilient at the core, the key areas are as follows; the platform is geographically split with multiple secure data centres in London and dark Fibre Connection between Data Centres and multiple diverse routed transit internet connections. Our service is peered with LiNX (with open peering policy) and each service is modular. All hardware can scale out, simply by increasing numbers in each service cluster.

“Customers need to look for all of the above as these are all fundamental requirements of a business-grade hosted solution without these elements clients are open to long periods of downtime due to single points of failure. We can also provide full redundancy options at the connectivity level.”

Will you be able to support future developments such as the growth of communities with free/low cost telephony services between clients while maintaining secure tenancies?

Lesley Hansen of Teleware, “The hosted Communications platform has been designed to be both scaleable and able to grow without any disruption to the existing user base. As a multi-tenancy platform with switching capabilities support for communities within secure tenancies is standard.”

David Dadds at Vanilla IP, “The answer to all is ‘Yes’ apart from the ‘free’. The old adage of no such thing as a free lunch comes to mind as the day it costs nothing to run our network is the day we can give services for nothing. The resident or communities’ type market is not something we have focussed on a lot at the moment, but I have no doubt that as the overall user base grows there will be opportunities in these markets but how profitable revenues will be generated has still to be worked out.”

Entanet's Voice Technical Lead, Jon Farmer, “All Entanet VoIP customers receive free on-net calls regardless of their choice of service” adds Farmer. “Additionally, as a member of the world's largest federation for IP voice termination we have multiple peering agreements with other carriers, enabling us to

Lesley Hansen of Teleware

provide low cost calls across networks.”

Farmer explains there are currently two schools of thought regarding the future of IP voice. The first expects all customers to benefit from free calls at some point in the future due to the growth of VoIP peering agreements between carriers that result in low or no termination fees for a call. However he believes that carriers will be reluctant to pass these savings on to end-users and will instead charge for the bandwidth consumed, changing the charging model. Alternatively some people believe the carriers will recoup their margins through the sale of additional services such as HD voice and video calling. At best, Farmer believes the EU may see some reduction in costs but is unlikely to benefit from completely free calls across all networks.”

Martin Sims, of thevoicefactory, “Yes, we are pushing for all calls to be On Net and therefore free and unmetered to the customer, we look to provide the stickiness of our customers by providing value add and performance-enhancing solutions with strong integration.”

Is there a wide choice of applications?

Lesley Hansen of Teleware, “We currently provide around 50 application packages providing services from the simple connectivity, hunt groups and find me follow me to standard office applications such as voice mail, fax mail, and voice conferencing, as well as advanced applications such as call recording, encrypted services and mobile support on the LAN.”

Dave Dadds, Managing Director of Vanilla IP, “We believe that we have one of the largest range of products and services of any SP in the UK. Available today include hosted PABX, SIP trunks, Call Recording, Call Centre, on-line Call Logging and Reporting, credit locking, desk top application which include reception console, Unity, Call Centre Supervisor and Agent client. To wrap this all up we have our Uboss provisioning and billing software that allows a reseller to manage the whole life cycle of the client including producing an invoice at the end of the month.”

Brian O’Sullivan, CTO at Voicenet Solutions, “Hosted systems have great features, they are fantastically flexible, the best have plug and play features that work everywhere, and they allow a degree of collaboration that removes geographic boundaries from a business. They are much easier to add new features to, and tailor them to client requirements. But a hosted provider must never forget rule number one – if the phones aren’t reliable, this counts for nought.”

Entanet’s Voice Technical Lead, Jon Farmer, “Entanet has a well established and

proven portfolio of successful VoIP services that cater for different groups of customers. One of its products called ‘VoIP Express’ is a single user, pre-pay solution that is particularly suitable for residential and SoHo customers, with an online management portal, SMS text messaging, voice mail and black/white lists. Meanwhile, its ‘VoIP Enrich’ product is a fully hosted, feature-rich, scalable business-class solution suitable for both SMEs and corporate as it provides essential features including hunt groups, call queues, call recording, auto attendants, voice mail, extension level dialling, 01/02/03/0845 numbers and more. Finally, its ‘VoIP EasyAccess’ product provides SIP/IAX2 trunking with a comprehensive range of numbers for customers simply looking for call termination.

“Over the past 12 months we’ve seen an increase in demand for complete voice and data connectivity solutions which encompass VoIP. Our team of presales and solutions consultants has been busy helping reseller partners design and implement comprehensive IP VPN solutions that include resilient IP voice systems to cater for multiple branches and/or remote workers.”

Market Outlook:

Tom Fellowes, Sales Director at Spitfire Technology Group says that his company believes hosted telephony reached a turning point in the last year and is now an accepted and reliable solution for customers.

“While we especially recommend this for business start-ups, smaller multisite customers and small businesses, it is also gaining traction in the up to 50 extension sector. The key drivers for this have been the recession and particularly the credit crunch, plus the more widespread acceptance of ‘cloud’ IT solutions and the improved customer understanding of what is needed to provide a reliable service.

“The credit crunch made business finance almost impossible to get for start-ups and very small businesses. Hosted telephony solutions such as Spitfire’s SIP Communicator require much lower capital expenditure and are a 100 per cent tax allowable business expense, unlike CAPEX.

“The general move to cloud provision of IT services means businesses are less concerned about owning premises equipment, particularly if operating costs can be shown to be substantially reduced compared to a conventional ‘box on the wall’ telephony solution. The advantages of the features that cost significant amounts using an IP PBX being included at no cost, such as multisite working and voice mail to email mean small businesses can get big business features at an incredibly low cost.”