

Will Cisco Fly in the Enterprise Telephony Market?

The Duke of Data aims to become the Viscount of Voice – but the usurpation still requires the overthrow of power of the PABX. Stephen Coates reports.

No reader of this magazine will be unaware of the increasing popularity of the carriage of voice traffic through IP networks. It is an application that is being increasingly deployed in enterprise networks with Cisco equipment being part of many such deployments. For many of these applications, the use of Cisco equipment is a natural extension of the company's strength in the LAN and WAN component market. However, the embryonic application of on-site telephony is not. How Cisco will address this challenge will be a measure of its mettle.

There are four basic applications of VoIP:

- Carriage of voice through an organisation's private IP network, in addition to data for which it was most likely to have been constructed;
- Carriage of voice through an ISP-managed, Internet-based VPN;
- Carriage of voice through the Internet; and
- Carriage of voice between terminals of a LAN-based telephone system within the organisation's site.

The first three of these applications can be implemented independent of the type of enterprise telephone system used – indeed, as reported in 'The IP PABX: System Scarcity Slows Support' (*CommsWorld*, June 2000), most PABX vendors are developing IP interfaces for just such applications. The cost-effectiveness of the first two applications of voice over IP is widely recognised, with the result that WANs are increasingly carrying voice in the form of IP packets rather than as TDM channels. The fourth application is quite different.

Described in the article 'The Many Applications of Voice over IP, Part 2' (*Australian Communications*, April 1999), LAN-based telephone systems transmit voice between IP handsets, telephony-enabled PCs and gateways via an on-premise LAN as an alternative to a PABX or Centrex. Cisco, and at least 15 other companies, develop such products, although at least two of them use ATM instead of IP as the packet technology.

Although such systems can be deployed to complement a PABX, they are primarily targeted at replacing them. Knocking the likes of Nortel, Ericsson, NEC, and so on, out of their core businesses will be a formidable challenge.

Nonetheless, the forecasts of the uptake of this technology are rosy. In its *InfoTrack for Enterprise Communications* report, the Phillips Group/InfoTrack, forecasts sales of 'telephony enabled LAN units' in the US to increase from 80,000 in 1999 to 600,000 this year, and 7,300,000 in 2005. In its *Market Demand and Implementation Strategies IP LAN Telephony* report (1999), the same group also forecasts that "17% of large enterprises in the US will begin implementing [IP LAN telephony] in 2000, increasing to 55% the following year. By 2004, over 90% of businesses with more than 500 employees will be installing IP LAN telephony." Similarly, the Cahners In-Stat Group has



forecast that the number of sales of LAN-based telephone systems will match those of PABXs by late 2003.

Cisco: Very Well Placed

Cisco is attacking this market from a position of strength. It is financially sound, it has experience dealing with embedded operating systems and, perhaps most significantly, it has a culture of rapid product development which will enable it to develop its products as the market dictates. In contrast to many other new entrants into this market, Cisco's telephone system did not begin its development in somebody's garage.

Cisco entered the premise telephony market when it bought the Selsius Systems subsidiary from American PABX manufacturer Intecom in 1999. Cisco has supplemented this acquisition with scores more, including CTI developer Geo-Tel (which itself had just acquired predictive dialler manufacturer TeleQuery), central office exchange manufacturer Summa Four, Weblina Communications (a developer of collaborative browsing software) and, earlier this year, Applied Voice Technology, a developer of IVR and unified messaging systems. More recently, Cisco and Hewlett-Packard entered into an alliance which will see HP becoming a Cisco reseller and Cisco integrating what used to be HP's CTI products into Cisco's product offerings.

Cisco has put together a product suite that can potentially address most market sectors. The IOS IP-based key system addresses small sites, the AVVID LAN-based telephone system addresses larger sites and IPCC is targeted at call centres. Significantly, and in contrast to most other LAN-based

(and PC-based) telephone systems, AVVID supports both the QSIG standard interPABX signalling protocol and CSTA, the international standard CTI protocol.

Finally, Cisco's entry into this market comes at a time when some of the incumbents are, both here and in North America, becoming less competent at successfully responding to opportunities and implementing systems without mishap.

So far, Cisco has approached the market cautiously, avoiding the pitfall of a scrutiny-inviting launch which would inevitably be followed by exposure of shortcomings and a market

perception of anti-climax. Instead, Cisco has contributed to the discussion of VoIP that has been a regular feature of communication industry magazines and conference programs.

Cisco has also been assisted by a number of commentators who perceive VoIP to become so prevalent that manufacturers of PABXs and central office telephone exchanges will

soon find themselves out of business. Such nonsense has been responded to by PABX vendors with glib claims such as their PABXs support 200 features versus 20. Serious discussion of the real pros and cons of respective systems has been conspicuous by its absence.

The Challenge Ahead

All that being said, there are, according to Brendan Leitch, a senior consulting engineer with Cisco, ten AVVID installations in Australia using only AVVID, 30 installations using a hybrid of AVVID and a PABX and 15 sites trialling AVVID. To achieve even

1% share of the premise telephony market, Cisco faces a number of significant challenges.

One of these is market culture. Those in the telephony world are accustomed to 7x24 support, having hardware and software support from one vendor, DC-powered systems that can operate for hours not minutes if the power fails, and very, very high reliability. All AVVID components can be DC-powered, although for most components, this is an option.

And future sales numbers might not be quite as rosy as the above-cited numbers indicate. Mr Leitch cites a survey by AAS Consulting predicting that "66% of Australian businesses are considering VoIP inside their businesses by 2002". Expect a very high percentage of these businesses to use VoIP to transmit voice between their PABXs.

The other, and more significant challenge for Cisco will be adapting from supplying a market in which it is the dominant supplier to one in which it is not.

According to Leitch, Cisco has 77% of the router market in the Asia Pacific region. Contrast this with the PABX market in which NEC has the largest share of the Australian market at just over 30%, according to the Gartner Group (*Premise Switching Systems Market Update in Asia/Pacific*, 1999), and the world market in which the largest share (measured by lines) is held by Nortel Networks, at only 13.4% (*Worldwide Premise Switching Equipment Market Trends*, 2000).

This has implications when a system is to be selected by competitive tender.

Can Cisco Compete?

Representatives from Alcatel, Ericsson and NEC, collectively estimated that two thirds of large systems they sold to new accounts are acquired via a request for tender (RFT), whereas the figure for small systems was less than a quarter. A good RFT for any technology stipulates

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capabilities, not attributes, and is not biased towards any one vendor or technology. Although such objectives are not always followed, with ten PABXs and one Centrex service in the Australian market, RFTs for such systems are much more likely to be written around the acquiring organisation's requirements rather than the attributes of a prominent vendor.

The challenge for Cisco and its distributors will be to sell in a competitive market against established vendors who are at least as likely to be as successful as Cisco. Although Leitch advised that about half of Cisco's existing installations were achieved by competitive tender against a PABX or Centrex, my recent experience tendering for a telephone system for a client was disappointing.

In this case, although the RFT called for a telephone system (PABX, Centrex, PC-based telephone system or LAN-based telephone system), the Cisco distributor decided not to respond. Of course, all vendors will respond to only some RFTs, but the distributor representative claimed that "[the client] does not have any real understanding of where the market is going from a Cisco perspective". This reads like a complaint that the RFT was not written for a LAN-based telephone system.

More telling, however, was the statement that: "In most of our responses we

will be competing with companies selling the same product, frequently with the same design in mind, and often with very similar pricing." Cisco's distributors are clearly more accustomed to competing with each other, bidding the same kit rather than bidding against suppliers of other systems, let alone other technologies.

Another comment by Cisco concerning that particular request for tender, was an objection to a lack of an opportunity for vendors to give presentations and to give demonstrations.

Although all vendors love to give presentations, PABX vendors are more accustomed to responding to an RFT that details the requirements of the organisation written by persons who understand both the requirements and the available solutions, and that does not include any vendor presentations.

An objection to the evaluation of responses on their merits carries the tone that the potential customer and/or their consultants don't understand that organisation's actual requirements, and that because the

RFT hasn't been written around that vendor's product, it must be because its authors are ignorant of that vendor and where that vendor wants us all to believe technology is headed.

Cisco will do well to learn lessons from IBM's 1984 acquisition of American PABX manufacturer, Rolm. Given its then dominant position in the market, IBM representatives were known to sneer at those seeking to acquire a telephone system by competitive tender that was not written for IBM (some still do) and its share of the American PABX market tumbled. IBM sold the business to Siemens in 1992.

Cisco has a challenge to convince consultants to re-write their template requests for tender to accommodate LAN-based telephone systems as well as PABXs. But if it attacks them for not biasing them towards the latter, the challenge will be that much greater.

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