

Leveraging the LAN

IP telephony should be a given; wireless access is. Both leverage the LAN, but Hot Spots are igniting a revolution.

The business case for IP Telephony is compelling. If PABXs were not in the way it would be overwhelming, but as Tim Gingell pointed out in the February issue, “a development in the general understanding of the benefits of IP telephony is also needed”.

So true and so sad. *Misunderstood* because of associations with Internet telephony. Thrown off course by the fear, uncertainty and doubt generated by PABX vendors in order to buy time and catch up. However, that time has come and the same vendors are now promoting IP migration strategies. Thus, Tim Gingell is right on the money when he says that this is ‘a maturing market’.

Why is the business case so compelling? This is my take on the key benefits: (1) fast creation, deployment and usage of applications; (2) stress-free increase in personal productivity; (3) easier and cheaper to manage one network than two; (4) ability to interface telephony with mainstream business processes; (5) intrinsic flexibility of an IP-based network; (6) overall impact on the bottom line; and (7) use of standards-based technologies, i.e. IP and the Ethernet.

Not too hard to understand.

VoIP usually means that IT becomes responsible for voice so there might be a turf war issue. On the other hand, it may give the telecoms manager the opportunity to reclaim the high ground.

Another issue is the potential need to beef up the LAN because of the new VoIP traffic, but vendors claim that positive ROIs

can be reached in a matter of months.

However, one can query the value of ROIs since companies have to have phone systems whether they make money or not. (Was the equivalent calculation made for the PABX?) An alternative way to justify the investment is to look at the total cost of ownership.

Benefit (7) is the first LAN lever and it is being applied, but let’s be honest, IP Telephony does not sell itself. CxOs and IT managers have to be convinced and that takes time. Wireless access, however, is selling like those proverbial hot cakes.

Wireless extensions to the LAN (W-LANs) are easy to implement and very convenient to use, particularly for people who don’t have a real office. For example, there is no need to look around for a free LAN connection, so ad hoc conferencing can take place anywhere and at anytime. At meetings everyone has immediate access to personal and corporate information and files can be exchanged on the spot. These benefits are hard to quantify, but users report increased productivity without additional stress.

But – and it’s a very big but – this development is being driven by mobility needs outside the office. It’s what the market wants so it does sell itself!

Over 50% of the average enterprise is mobile, and until recently the communications needs of these employees have only been adequately met on the voice side of the equation. However, secure access to e-mail and host resources such as CRM and ERP systems plus high-speed connections for downloading files are obvious data communications requirements. This has led to

the rapid growth in 'hot spots', a term that refers to W-LAN access points in the places where mobile professionals roost, e.g. business areas such as hotels, airport lounges, and conference centres.

W-LANs are also a great solution for small- and medium-sized businesses and the price is right for use in the home. Both market sectors derive all the benefits of a LAN without the need to run cable around the premises.

The breadth of the combined marketplace indicates that high-speed (11 Mbps) wireless data will be something we take for granted. And a large, expanding market also means that prices will follow the PC model and the hardware is already becoming a commodity.

There's a standard on which most everybody agrees (IEEE802.1b) and the same interface is used in all four environments. Thus, the proliferation of wireless hardware underlines the need for compatibility between the PC cards and the base stations of different vendors. This task is handled by the Wireless Ethernet Compatibility Alliance (Details at: www.wifi.com), which brands compliant products as "Wi-Fi."

The key issue, about which a deal of nonsense has been written, is security. Is the interface secure? No, it is not. Homes are not secure if you leave the door wide open. You make them secure.

With W-LANs you start by turning WEP (Wired Equivalent Privacy) on. Why it's off by default is something I don't understand. Then you can implement an end-to-end solution based on the IEEE 802.1x security standard. VPNs are an alternative; these are already widely deployed to provide remote workers with secure access to the network via the Internet.

The green shoots of a revived economy may be starting, along with Spring, but IP Telephony and W-LANs generated impressive sales even in Q4 2001. This year the sky could be the limit – literally in the case of wireless. Lufthansa has a flying Cisco system on trial.

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