



Cure network nightmares with thin clients

A network of computers with their own operating systems is a positive nightmare to manage

There is a body of individuals who yearn for the halcyon days of dumb terminals, proprietary systems and room-sized mainframes. Why should this be, in the age of PCs, Windows and Pentium II chips?

By the mid-90s, the prevalence of PCs in the workplace, coupled with increased reliance on networks, saw industry analysts starting to worry about "total cost of ownership". While a PC may cost only £1,500 to purchase, when you factor support into the equation, its total cost to the company could be as high as £10,000. "Help us," cried organisations unwilling to bear the cost. The operating system vendors replied, "No problem." What has resulted from their fevered imaginations? Terminals.

Terminal excitement

I've grown up almost in tandem with the PC and this has given me a cynical view of the mainframe market. Its model of a central repository with "dumb" terminals is at odds with the current bloated system I use daily. Yet, I worked a number of years in network support and management and learnt the hard way that a network of computers with their own operating systems is a positive nightmare to manage.

Terminals provide a level of security and administrative control not possible with ordinary systems. You can supply users exactly what they need in a controlled environment, with little chance of it "breaking". This results in an easier to use system, wider application availability and a lower cost of ownership. UNIX users will cry that they have had this for years, yet they have never had the application base that Windows users have.

For most computer users, the word "terminal" reminds us of the green-screen text display units that Apple saved us from. Yet the wave of Java network computers and Windows terminals that is starting to arrive is nothing like that. These machines are usually reasonably powerful PCs without CD ROM drives, hard drives or other expensive extras, but able to run programs and even parts of operating systems across a network. This makes them important to firms looking to provide spatially enabled systems to a large number of workers. Even with programming toolkits, customisation languages and Web-based products, it is still difficult to deliver applications to users on a wide scale.

Java-based computers download their applications from the server and execute them themselves. This necessitates a fair degree of client processing power. The Windows client establishes a connection to the server and runs the user interface: application execution and processing occurs on the server. The Windows server therefore needs greatly increased memory and processing capabilities; applications requiring a high level of processing or data storage can split their demands between client and server.

While the initial hype over Java-based clients generated a lot of interest, delays and lack of application support have made even Java junkies jaded and has allowed Microsoft to steal the show. Windows Terminal Server, based on Windows NT Server 4.0, is its latest offering. It extends NT Server to allow it to run multiple application sessions. As the applications run on the server, any Windows NT 4.0 compatible package, even a GIS, can run in this way with little or no redevelopment.

The new wave of terminals will play an important part in corporate computing. Even though initial interest may seem slow, there is little chance that we will use computers less in our daily lives, and therefore management issues will play a large role in the future. Expect to see a terminal arriving at a desk near you. Soon.

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