

White Paper



Managing bandwidth can avoid unnecessary upgrade expenses

The huge increase in bandwidth usage worldwide has led to major expenses in line, hardware and software upgrades for numerous companies, big and not so big. However, in many cases, it has subsequently been proven that these costs were in fact avoidable and unnecessary.

Research has shown that employee abuse of e-mail systems and Internet access has been a major cause of the sharp rise in bandwidth demand, and that much of the usage is not mission-critical, and certainly not related to the company's business or the employees' jobs.

According to an article entitled "E-mail as evidence: threat or opportunity?" "Some 27% of large US firms have begun checking employee e-mail, according to the American Management Association. One large entertainment company was able to cancel an order for a T3 line after monitoring and limiting audio and video files e-mailed to employees. The company saved itself \$20 000-\$50 000 per month.

"Industry analysts have found that in most companies, e-mail accounts for about 70% of all network traffic."

Previously companies used to throw more bandwidth at a congested network, but that costs money which in the majority of cases is expensive and unnecessary.

Dave Shepherdson, CEO. Phenomenal Networks, says companies need to identify which types of traffic are essential to their business and if the data is both mission and time critical. For example, it is not generally necessary for e-mail to be real-time. "It usually doesn't really matter whether you receive an e-mail immediately or within five minutes," he explains, Voice over IP (VOIP), on the other hand, is mission critical and time critical.

Once a company has analysed which types of information or applications are time critical the bandwidth allocation must be set up appropriately. Prioritisation of bandwidth munches such as Web Radio, Kazaa downloads, e-mail database synchronisation will have a dramatic effect on the efficiency and throughput of the entire network. Users – and abusers, for that matter – can be traced down to the UDP/TCP port.

By the same token, groups of users can be allocated bandwidth according to their job requirements. For instance, sales and development divisions within a company would need access to the Web, but the finance department would realistically have very little use for surfing in order to fulfil its role, but access to the Web Server for customers to place orders must be extremely fast.

By implementing a bandwidth management policy, companies can use the network as originally intended.

Phenomenal Networks specialises in Voice over IP, Bandwidth management and Video applications to the middle to large corporate market.