Case Study

MWB Business Exchange does performance tuning with Fluke Networks' NetFlow Tracker, NetFlow Monitor and ResponseWatch

At a Glance

Industry:
Serviced office provider

Location:
United Kingdom

Network Type:
Multi-site network

Challenge:
MWB needed to see what was happening on its WAN and the LANs at its 51 sites around the United Kingdom to ensure that users were using their network properly and to monitor network performance.

Solution:
MWB bought NetFlow Tracker, ResponseWatch and NetFlow Monitor to help monitor network performance and to determine when and where additional and expensive capacity might be required.

Results:
"Thanks to the performance tuning our monitoring applications have helped us achieve, we now only need to look at them daily when one of the sites alerts us that a customer is complaining of slow service. Then we use NetFlow Tracker to diagnose the problem. Routinely, we use NetFlow Monitor to show us the whole of the MWB network, while ResponseWatch is used to check our 4Mbps line at the NOC and ensure it is running smoothly." – Mike Michael, technical support manager, MWB Business Exchange

Products:
NetFlow Tracker, NetFlow Monitor and ResponseWatch

Overview

MWB Business Exchange Plc (MWBEX) was formed in 1997 and is the United Kingdom's second largest operator of serviced offices. Its current portfolio comprises 51 centers, providing 880,000 square feet of prime office, meeting and training room space. MWB centers are located in major cities, including Birmingham, Edinburgh, Leeds, Manchester, Milton Keynes, Nottingham, Oxford and the Thames Valley, with a core group of centers based in and around London. The company offers the best office solutions – providing high-quality workspaces and office services that give customers the very best in terms of locations, systems and environment. In addition to serviced offices, MWB also offers a "virtual office," meeting and training rooms, video-conferencing and offices for hire by the hour or day.

The company provides Internet access and flexible bandwidth to its serviced offices on a variety of lines, from ADSL through LES10 & LES100, to E1 and E3. Two links come off the ISP's router to provide shared and dedicated access. Approximately 70 WAN routers are a mixture of Cisco 2600s on the dedicated links, through to 3600, 3700 and 7200 units.

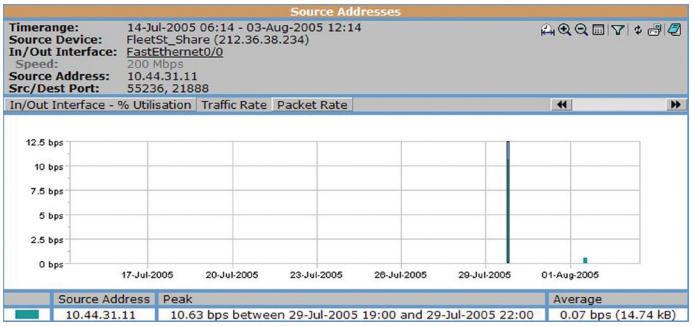
Shared access is capped at 1Mbps balanced and users are given an IP range, advised to install a firewall and then contend for bandwidth with other shared access users, who are often smaller businesses, such as startups. Technical support manager, Mike Michael, says that shared access customers are recommended to install a firewall, and although the bandwidth is not guaranteed, they often install more sophisticated services, such as VPNs and email servers.

The dedicated lines have 5 Class C addresses and bandwidth guaranteed by port capping. Dedicated lines are usually chosen by corporate customers leasing satellite offices, so they can host websites, run full email servers and possibly VPN stacks linking them to their corporate headquarters.

Execution

Michael explains the problems faced by the technical support team, that eventually led them to seek a network monitoring solution: "There were a couple of issues. First, we had no network visibility at all, so we could not see what the users were actually putting on the network and had no way of knowing if they were abusing the line. Web and FTP servers are not supposed to be put on the shared services, as they represent too big a drain on the bandwidth. When sites called in to say everything was running very slowly and users were complaining, there was no way of knowing if it was a virus issue or someone watching video or downloading large files, etc." He added: "Such occurrences are also up-selling opportunities, because if there is nothing that can be done to improve the shared service, due to it being fully utilized within the SLA, we can offer a more reliable service through the dedicated lines. The NetFlow Tracker, NetFlow Monitor and ResponseWatch applications make a direct contribution to our profibility."

Michael cites an example of service overload: "At our Soho, London site, the line was going down every day and this was caused by just three users pushing it over 3Mbps, which led to other people complaining because their network requests were not being serviced. As Soho is the heart of film and TV post-production in London, a higher proportion of our tenants there are media-oriented, using bandwidth-intensive applications like real-time video editing.



When an MWB customer's network was attacked, Michael and his colleagues used NetFlow Tracker to provide the police with port information, time and dates.

With the NetFlow stats from NetFlow Tracker in hand, it is now possible to enter into friendly negotiations with the culprits and offer them a trial on the dedicated service, after which a supply price can be negotiated. NetFlow Tracker also highlights people using Napster and other download services, so we can suggest to shared service customers that they ease their problems by restricting access to such sites."

The second issue for Michael was identifying where and when it was necessary to install costly additional lines as bandwidth demand rose. He observes: "NetFlow Tracker allows us to check the stats on a line and see where it peaks over a period of time. This can save us installing, for example, a new 2Mbps line – at a cost of several thousands pounds per month. Now we can ensure line use is optimized and therefore cost-effective."

Michael had seen NetFlow Tracker, NetFlow Monitor and ResponseWatch demonstrated by a reseller some time before MWB decided to buy the products. NetFlow Tracker and NetFlow Monitor were installed in May 2005 and ResponseWatch shortly after, with all applications running on dedicated servers.

The final word

For Michael, these applications have made a big difference to the management of networks and users: "On a daily basis we only now need to look at the applications when one of the sites alerts us that a customer is complaining of slow service. We will use NetFlow Tracker for diagnostics at that point. NetFlow Monitor shows us the whole of the MWB network, but ResponseWatch is used to check our 4Mbps line at the NOC and ensure it is running smoothly.

"We only look at individual site performance when they ask us or need reports, so these applications have helped us eliminate a lot of routine network monitoring that previously had to be done manually."

About Fluke Networks

Fluke Networks is a leading provider of network and application performance management solutions. The company's technologies enable enterprises to reliably and securely manage the delivery of mission-critical applications across their infrastructure. Fluke Networks' products increase application and network availability, optimize the use of bandwidth, and reduce operating costs across traditional and IP-based infrastructures. For more information, visit **www.flukenetworks.com.**