

Policy-Powered Networking in an Economic Downturn

“As IT spending increases slow this year, IT and business managers have become ever more focused on measuring their return on e-business investments.”

InternetWeek

Introduction

The Internet Bubble has burst, bringing with it an economic downturn that is driving businesses and e-businesses back to basics. Whether you're a CIO at a Fortune 1000, a small- or medium-sized business, or an ISP, your first step is getting the best use from your existing network infrastructure and IT resources.

Manage Your Critical Business

Resources

Allot Communications NetEnforcer™ provides policy-powered networking that lets you manage expensive network resources so your mission-critical business applications deliver the performance you need to succeed.

Instead of investing in additional WAN services, servers, or other networking hardware, Allot empowers you to more efficiently use your existing resources. Our NetEnforcer policy enforcement devices and our NetPolicy™ centralized policy manager link your business policies to specific network actions to improve and control your network users' productivity and satisfaction.

Through policy-based bandwidth management, server load balancing, cache redirection, network performance monitoring, and accounting services, Allot is a prudent investment that helps you control IT infrastructure costs.

Case 1: Nipping the Growth of Napster

Contrary to what many people think, the much-publicized decision by the U.S. Court of Appeals did not shut down Napster. The drain on networks and corporations continues unabated. At one

university near San Francisco, California, Napster and entertainment-related applications and file downloads continued to double the annual amount of traffic flowing across the university's network.

Option #1 – More Bandwidth

Having already doubled the bandwidth the previous year, increasing the bandwidth would again appear to be easiest option. Even if the cost could be justified, network administrators were concerned that the solution would not handle bandwidth-hogging entertainment applications that had become so important to students.

Annual Costs - Option#1

Add'l WAN installation cost:	\$ 0
Add'l WAN usage cost:	\$ 32,000
TOTAL	\$ 32,000

(Source: The University)

Option #2 - NetEnforcer

The Allot NetEnforcer offered the university another, more comprehensive alternative. By adding the NetEnforcer to its network, the university was able to:

- Prioritize administrative and departmental traffic over HTTP, FTP, email, Napster, and other non-essential traffic
- Guarantee different minimum levels of service for administrative locations, computer labs and dorm room connections
- Use NetEnforcer's monitoring and accounting facilities as part of a program to monitor, warn, and even penalize perennial abusers of network resources

Annual Costs – Option #2

NetEnforcer AC-301*	\$13,000
ROI payback period	4.8 months

(Based on US MLP without dealer discounts.)



Case 2: Feeding More Resources to SAP

A multinational manufacturer of food products based in the UK experienced a notable decline in the performance of its SAP application on its link to the US. In the spring of 2000, the company had increased capacity to 128Kbps, but this no longer seemed to suffice.

Option #1 – More Bandwidth

The 128Kbps connection to the USA empirically seemed to be a rather small connection and worthy of upgrading to 256Kbps. However, traffic flowing across this link was un-managed and as such, it was unclear how much traffic was truly related to the business-critical SAP application. Adding bandwidth would be a costly solution that would lack any controls to ensure that improvements in application performance are sustained.

Annual Costs – Option#1

Add'l WAN installation cost	\$ 0
Add'l WAN usage cost:	\$ 9,012
TOTAL:	\$ 9,012

(Source: British Telecom)

Option #2 - NetEnforcer

Managing the bandwidth on the international WAN link offered a more robust solution. The company added the NetEnforcer to its network and set network policies that ensured application performance by:

- Allocating at least 50% of the link traffic to the SAP traffic
- Ensuring that Napster and other digital entertainment traffic does not exceed more than 10% of the total bandwidth

These policies are reviewed every few months and adjusted as needed. If the bandwidth is eventually increased, or the company decides to use a VPN, the NetEnforcer will allow them to effectively allocate networking resources in line with their business priorities.

Annual Costs – Option #2

NetEnforcer AC101*:	\$5,400
ROI payback period:	7.2 months

(Based on Int'l. MLP without dealer discounts.)

Case 3: Guaranteeing QoS for eLearning

A leading provider of eLearning solutions was suffering from significant traffic congestion at its Tel Aviv company headquarters. Although they devoted sizable financial resources to their 1Mbps Frame Relay WAN access link, non-critical traffic was degrading performance and could negatively impact on their business: not only did eLearning class sessions suffer, but product demonstrations for new clients were also regularly experienced poor performance.

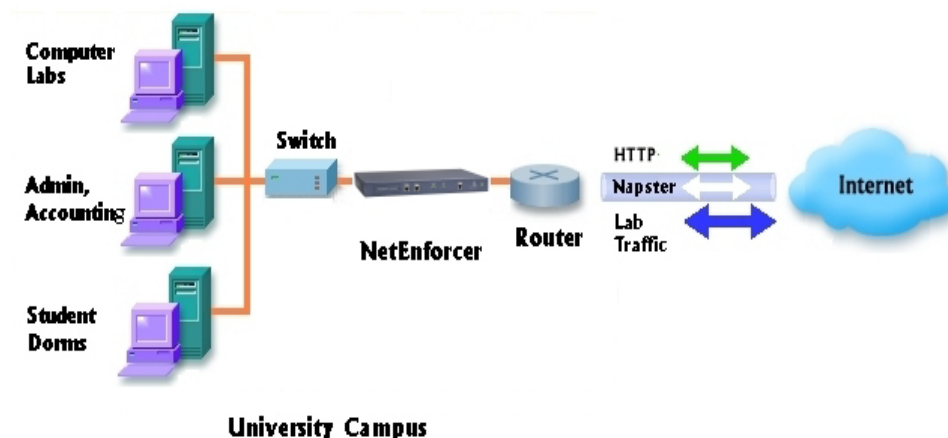
Option #1 – More Bandwidth

At first look, it appeared that the solution was just to add more bandwidth. However in these belt-tightening times, additional investment—without concrete guarantees for application performance was hard to justify:

Annual Costs – Option#1

Add'l WAN installation cost	\$ 0
Add'l WAN usage cost:	\$ 21,000
TOTAL:	\$ 21,000

(Source: Bezeq International)



Case 1: Nipping the Growth of Napster

Option #2 - NetEnforcer

Another solution was to intelligently manage corporate bandwidth using the Allot NetEnforcer. The company decided to add the NetEnforcer to its network and was able to:

- Prioritize eLearning traffic as “mission critical” so all eLearning related packets (TCP, UDP, or HTTP) were be given higher priority over less critical traffic like email and file download
- Use the comprehensive monitoring and accounting facility to ensure that network managers are constantly informed about network traffic behavior and are in a position to set and redefine service policies.

Annual Costs – Option #2
 NetEnforcer AC-201 \$9,000
ROI payback period 5.1 months

(Based on Int'l. MLP without dealer discounts.)

Annual Costs - Option#1
 Add'l WAN installation cost: \$ 0
 Add'l WAN usage cost \$ 11,000
TOTAL \$ 11,000

(Source: France Telecom)

Option #2 - NetEnforcer

The Allot NetEnforcer AC101 was installed at the Paris sales office to provide the traffic shaping and bandwidth management. The increased control of the network alleviated the need for the additional WAN capacity--and its high cost.

Annual Costs – Option #2
 NetEnforcer AC101 \$5,400
ROI payback period 5.8 months

(Based on Int'l. MLP without dealer discounts.)

Case 4: When CRM Traffic is Pivotal

A growing start-up in IP telephony has its EMEA headquarters in Nice, France, and a sales office in Paris. Due to strong growth at the Paris office, the number of employees doubled and performance of its Pivotal CRM application slowed to an abysmal pace due to email and non-essential downloads.

Option #1 – More Bandwidth

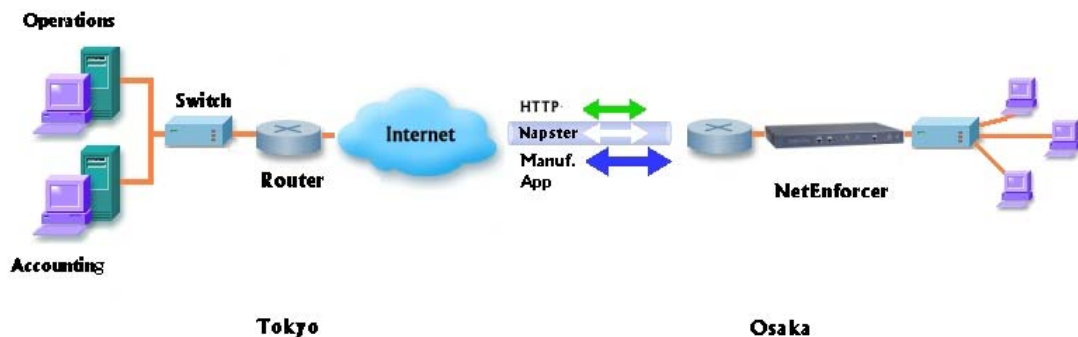
The sales office considered “modestly” increasing its bandwidth from 64Kbps to 128Kbps, but the additional carrier costs were be more than “modest”. Furthermore the extra bandwidth would not guarantee performance for the business-critical CRM application.

Case 5: Making the Delivery Just in Time

A manufacturer of auto parts in Japan has its headquarters and a manufacturing facility in Tokyo and facilities for another product line in Osaka. The company has two connections to its services provider: a 256Kbps connection from the Tokyo HQ and a 128Kbps connection from Osaka. For just in time delivery to its customers, the Tokyo HQ has a proprietary application that coordinates orders, inventory and delivery. Application performance has been slowing, but within the last six months application performance at the HQ has waned, especially from 3PM-5PM.

Option #1 – More Bandwidth

The networking department could double the bandwidth at the Osaka facility, but this would be a costly solution that might provide only limited relief.



Case 5: Making the Delivery Just In Time

Annual Costs - Option#1

Add'l WAN installation cost:	\$0
Add'l WAN usage cost:	\$12,450
TOTAL	\$12,450

(Source: NTT/OCN)

Option #2 - NetEnforcer

To contain WAN costs and maximize the performance of their business-critical application across the company, the company installed a NetEnforcer AC101 at the Osaka location. They set QoS policies guaranteed bandwidth for essential applications and limited congestion from email and less business-critical traffic.

Annual Costs – Option #2

NetEnforcer AC101	\$5,400
ROI payback period	5.2 months

(Based on Int'l. MLP without dealer discounts.)

Summary

Policy-Powered Networking offers prudent bandwidth management and policy-based solutions for meeting critical business needs in an era of economic uncertainty. Allot Communications NetEnforcer allows you to define specific policies that prioritize and limit bandwidth to users as well as guarantee bandwidth—and performance—for your business-critical applications.

Adding bandwidth, without managing this important resource, may alleviate a network bottleneck, but this offers only an interim solution. Additional bandwidth will simply not guarantee application performance of business critical applications. As soon as additional bandwidth becomes available, bandwidth-hungry applications will consume the additional resources and performance levels will decline. Indeed the NetEnforcer, with its proven ROI, is a wise choice in enabling corporate networks to meet increased demands on a tighter budget.

About NetEnforcer and NetPolicy

The NetEnforcer family of hardware products is designed to be installed at the LAN / WAN boundary of an Enterprise or ISP network to enforce administrator defined policies through advanced QoS traffic shaping algorithms. Tiered user-services, assistance in the timely delivery of multimedia applications, providing network-behavior aware performance guarantees and Service Level Agreements (SLA) in Voice over IP (VoIP), time-sensitive multimedia, and many other applications and applications services can be enabled with the installation of the NetEnforcer product.

NetPolicy provides a centralized platform for network managers to define and distribute network policies to enforcement devices throughout a network. The NetPolicy supports LDAP for retrieving organizational data from standard directories to be applied to network QoS actions. The NetPolicy is COPS compliant and supports differentiated services. By setting Type of Service (ToS) bits in accordance with network policy, end-to-end QoS can be achieved in a heterogeneous environment.

About Allot Communications

Allot Communications was founded in December, 1996 to deliver policy-based networking solutions that improve performance and enable the deployment of mission-critical, time-sensitive applications in IP networks. By providing flexible Quality of Service (QoS) solutions to enterprises, Allot allows network managers to direct allocation of network resources based on business priorities, and thereby to achieve higher efficiency and cost savings. Additionally, by providing Service Level Agreement (SLA) solutions to service providers, Allot enables network and application service providers to offer SLA-based services to their customers, and thus to increase their own revenue.

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