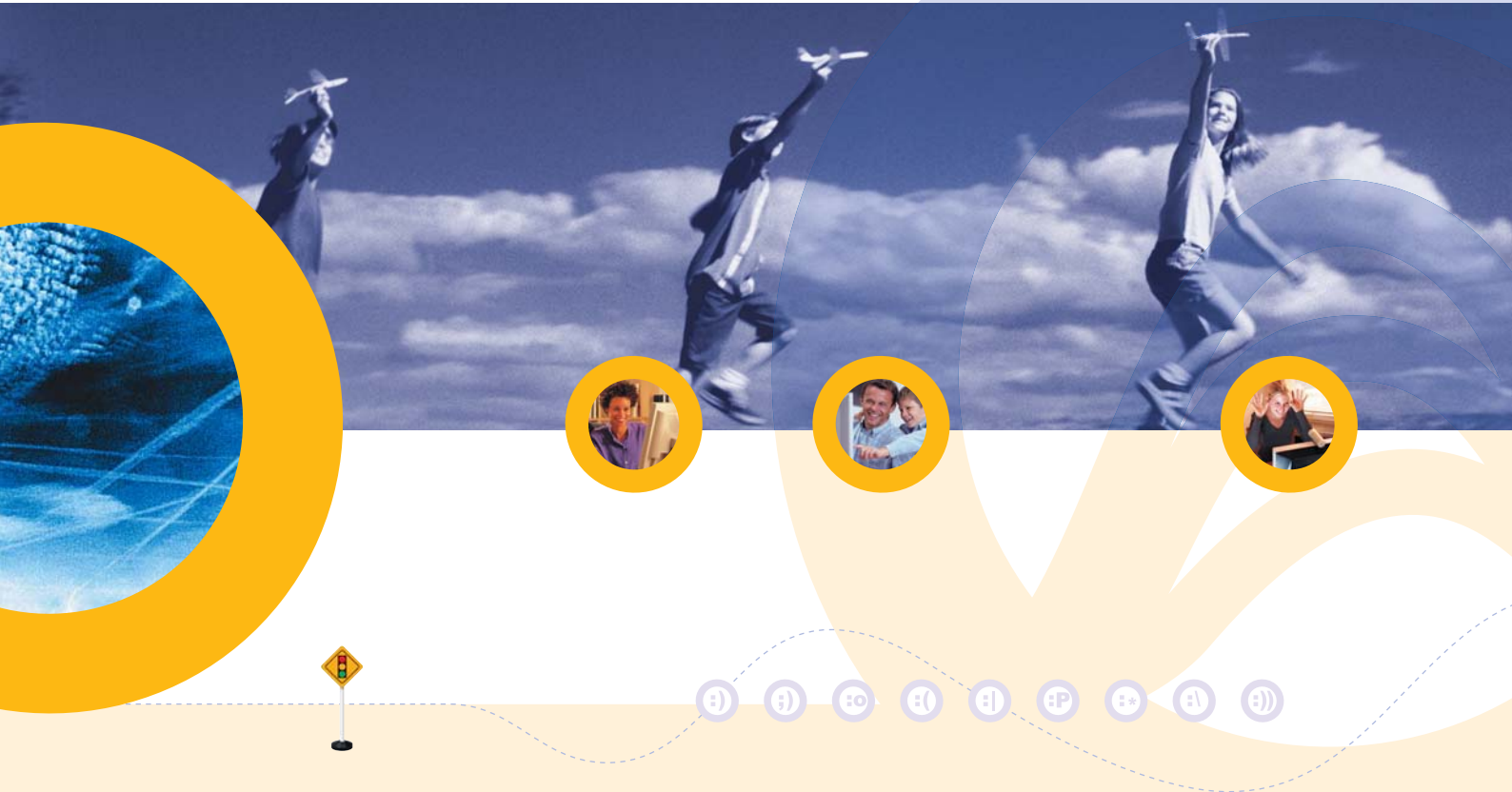


Enabling Traffic and Subscriber Control in Broadband Networks

Traffic Management Solutions for Carriers and Service Providers

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and Control
 Network Business Intelligence
 Traffic Control
 Subscriber Services
 Triple Play
 Network Costs

Allot's high-performance traffic management solutions are deployed by some of the world's largest service providers. Integrating deep packet inspection (DPI) technology with Quality of Service (QoS) enforcement capabilities, they supply the visibility and control essential for managing networks today.

Allot's solutions identify usage and traffic trends, provide the control to reduce customer churn, and give service providers the ability to offer new, innovative services which maximize average revenue per user (ARPU).



Total Visibility and Robust Control of Traffic and Subscribers

Traffic Control: Optimizing Performance

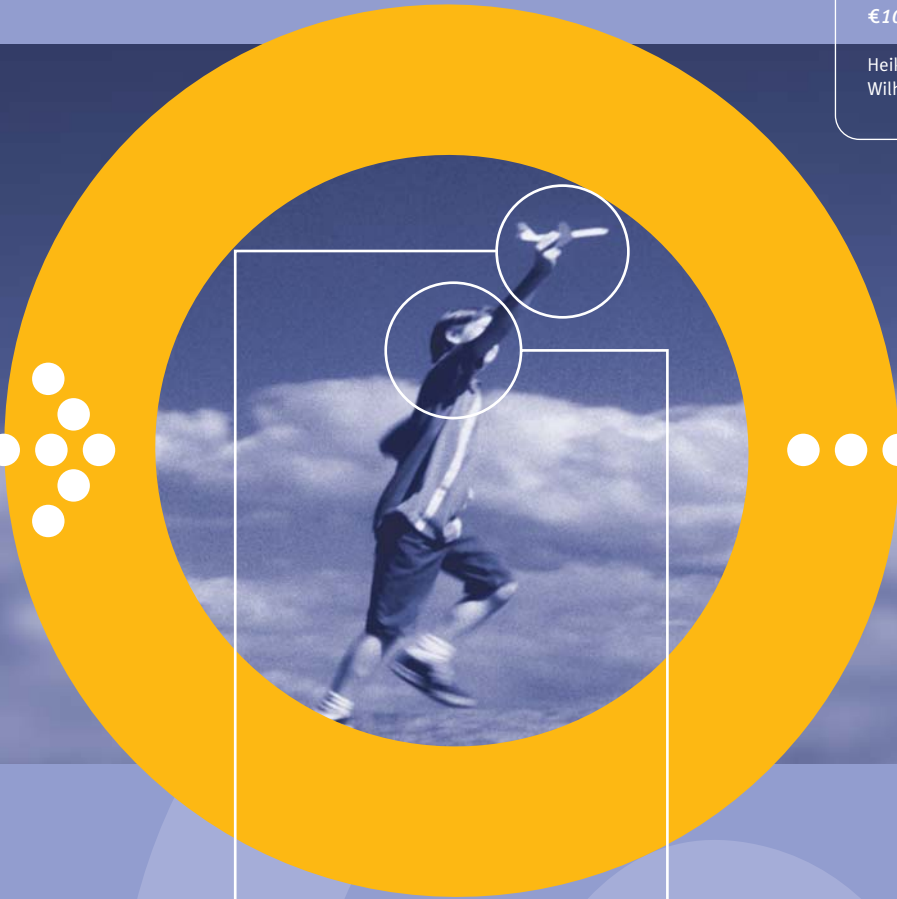
- Control P2P applications
- Achieve intelligent network visibility
- Guarantee unsurpassed Quality of Experience (QoE)
- Mitigate security threats

Subscriber Control: Maximizing ARPU

- Deploy new application-based services
- Track behavior and trends
- Deliver innovative billing models
- Enable self-provisioning capabilities

“
We instantly reduced traffic consumption by 150 Mbps and reduced costs by €10,000 per month.”
”

Heiko Liebscher, CTO,
Wilhelm.tel



Traffic Control

Control Costs
Reduce Churn

- P2P Control
- Intelligent Visibility
- Quality of Experience
- Network Security



Subscriber Control

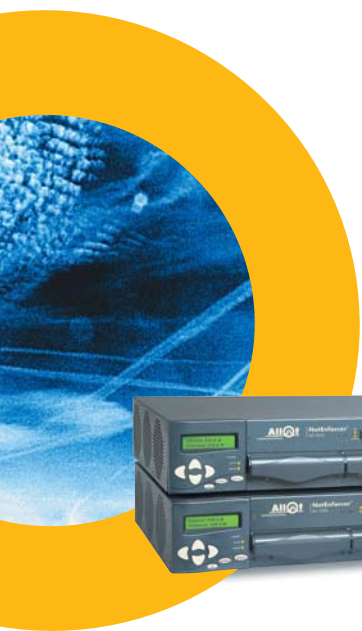
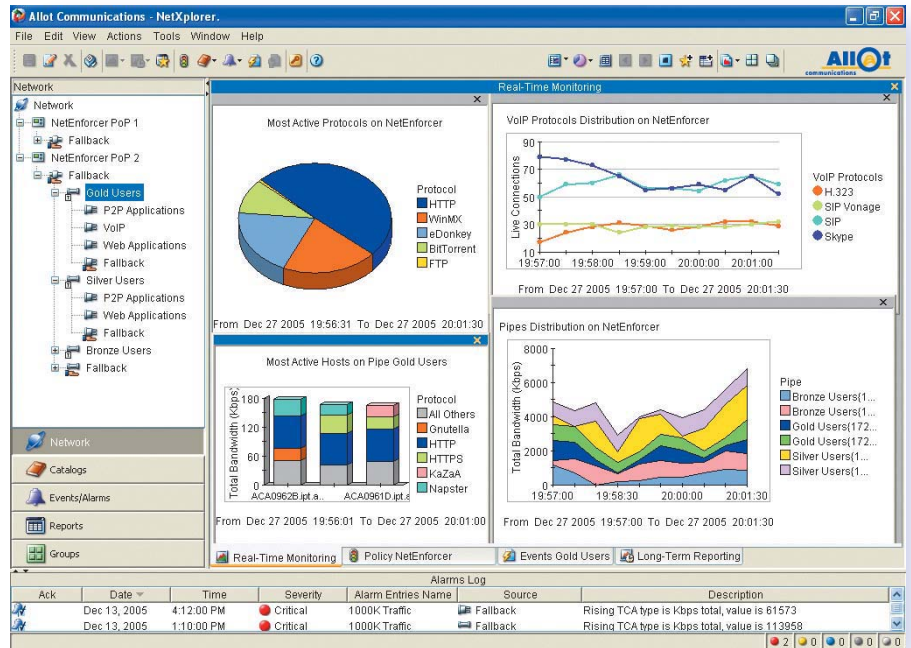
Increase Revenues (ARPU)
Provide More Services

- Application-based Services
- Track Behavior and Trends
- Billing Models
- Self-Provisioning

Network Business Intelligence

Broadband service providers are now looking for new ways to reduce their costs, while increasing their revenue per user. The added capacity of Allot's latest traffic management solutions can help carriers support more users per device, while the new functionality can also enable service providers to deliver revenue-generating services to their customers.

Steve Elliot, Senior Research Analyst for Network & Service Management, IDC



Allot understands that network management is not just about speed, feeds and bandwidth capacity. Today, it's about the combination of DPI technology, visibility and active control to give a mind to networks. It's about achieving the intelligence necessary for networks to finally come together to ensure better performance and security.

For carriers and service providers, network business intelligence enables more efficient use of network assets, delivery of tiered services to increase revenues, and the fast, real-time identification and mitigation of malicious traffic. It's about the delivery of powerful control over applications such as P2P, VoIP, streaming video and online gaming, ensuring fair use, high levels of performance and predictable operation

costs. It's about facilitating new service capabilities such as bandwidth-on-demand and tiered monthly rate plans that help increase ARPU, minimize churn and expand subscriber bases.

Offering the industry's broadest range of multi-gigabit performance, carrier-grade traffic management solutions, Allot's combination of hardware and software products are suitable for any IP service provider or carrier network configuration. They facilitate the visibility and active control that allows the reduction of operating expenses and the ability to offer new, differentiated services to increase profit.



Traffic Control: Optimizing Performance

NetEnforcer provides a clear and intuitive picture of how our network resources are being consumed, and helps us correct abusive traffic patterns that impact large segments of our customer base. NetEnforcer has become an integral part of our data services rollout because it gives us tremendous network efficiency, improves the end-user experience and performance, and saves us money in the process. ”

Robert Wolfe,
Network Engineer,
Northland
Communications

Our network performance dropped significantly when a combination of viruses overwhelmed our routers and caused a 10-fold spike in our active connections. Within an hour, we used Allot's NetEnforcer to identify ports used by viruses, and we created policies stopping the spread of the SoBig, Blaster and SQLSlammer viruses to our user base. ”

Jack Davis, IT Director,
Barbourville Online

Control P2P Applications: Enhance Your Customer's Experience

Allot's NetEnforcer uses advanced application signatures and behavioral recognition methodologies to auto-detect a wide variety of P2P applications, enabling providers to set policies that separately monitor and control subscriber activities, control P2P applications and leverage their popularity by prioritization.

Achieve True Network Visibility: Manage Your Customer's Experience

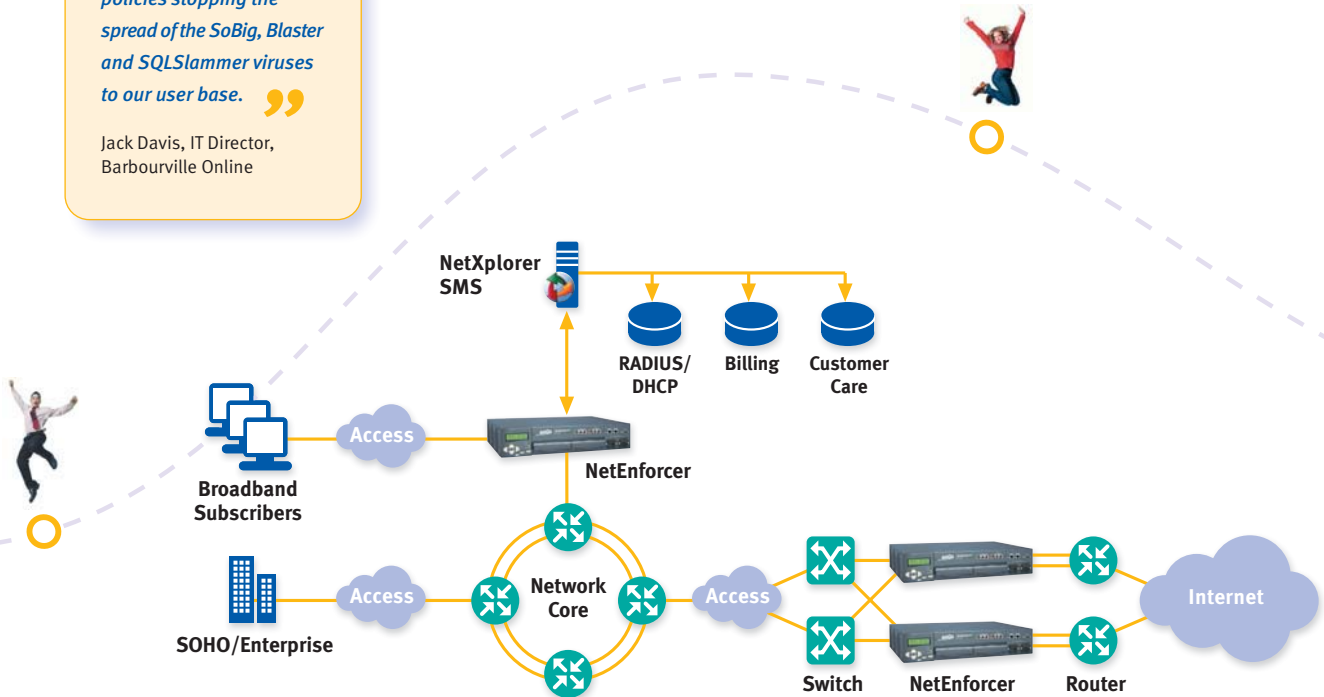
NetEnforcer utilizes advanced DPI technology to accurately identify hundreds of applications. Allot's NetXplorer centralized management system enables detection of heavy users, monitoring of network status, evaluation of trends and tracking of network behavior down to a single connection in order to help fine-tune network performance.

Guarantee Unsurpassed Quality of Experience: Maximize Your Potential

NetEnforcer manages network traffic by importance prioritization, enabling the matching of customer expectations and application requirements with policies that intelligently and efficiently manage available resources. This results in the delivery of fair and equitable service levels among subscribers, ensuring that all users receive high-quality web sessions without being overwhelmed by high-bandwidth subscribers.

Mitigate Security Threats: Protect Your Customer's Experience

NetEnforcer quickly identifies, isolates and mitigates many types of security threats and malicious traffic. Using behavioral analysis, port monitoring, DPI, early-warning mechanisms and automated corrective actions, bad traffic is prevented from flooding the network, thereby reducing costs and downtime.



Subscriber Control: Maximizing ARPU

Deploy New Application-Based Services: Increase Your Revenue Opportunities

NetEnforcer gives service providers the opportunity to deploy a range of new services, such as tiered services and application control. This guarantees the performance of key applications such as high-quality VoIP, streaming video and P2P file sharing and enables the offering of targeted service packages. NetEnforcer achieves this using advanced subscriber identification which integrates with DHCP, RADIUS and third-party systems such as billing, provisioning and OSS for invoking appropriate traffic management policies per subscriber, and automatic provisioning according to back-office systems.

Track Behavior and Trends: Plan Competitive Services

The network business intelligence offered by NetXplorer can be used to learn about subscriber behavior and trends and

understand when and how applications are being used. This enables the fast creation of optimal solutions for specific subscriber groups, customized according to their usage track record, and easy deployment of services in the network.

Deliver Innovative Billing Models: Increase Your Customer Focus

Allot's NetEnforcer enables service providers to collect highly-detailed, accurate usage information at both the subscriber and application level. Integrating easily with billing systems, this enables the offering of sophisticated billing plans, such as quota-based billing based on a weekly/monthly data volume limit for subscribers, and usage-based billing, based on the monthly volume of data transferred in total or by application.

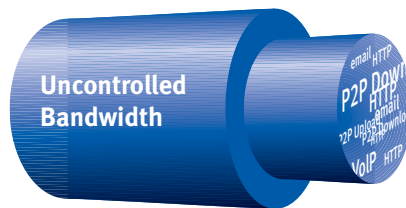
Enable Self-Provisioning Capabilities: Empower Your Customers

Allot's subscriber management system enables service providers to give self-provisioning capabilities to subscribers. Using a subscriber portal, service providers can offer a range of advanced services, such as turbo buttons and bandwidth on demand, allowing subscribers to receive additional bandwidth on a temporary basis.

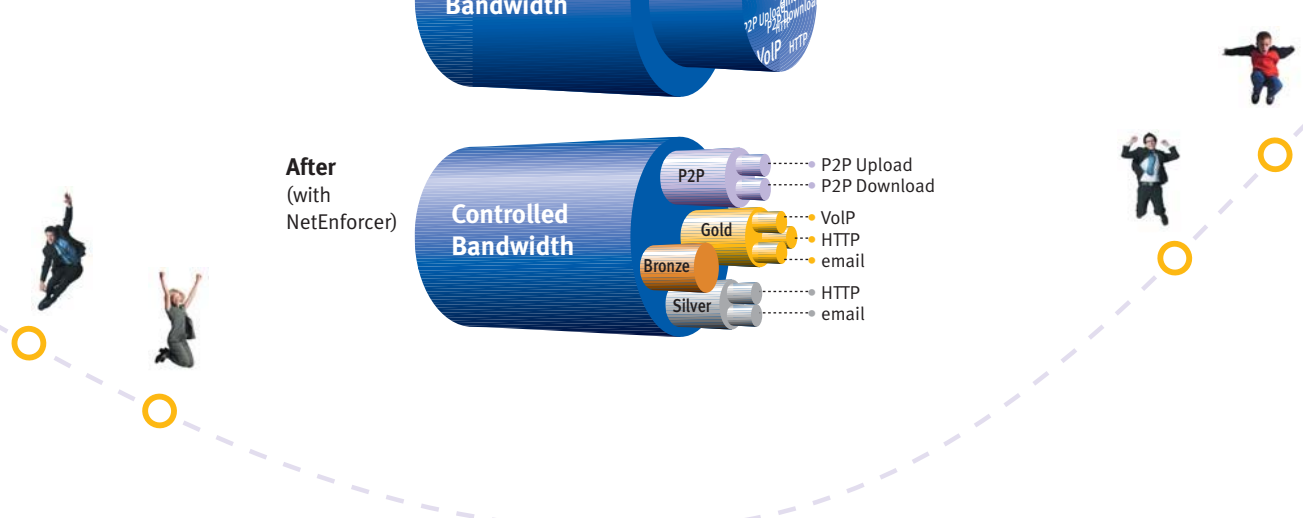
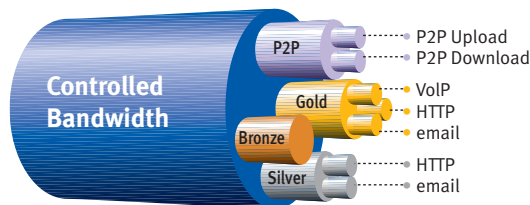
“*Bundling enables broadband service providers to lock in customers to their product offerings, helping to reduce churn and maximize output. Tiering also helps to drive adoption and market share gains by expanding the bandwidth and pricing options available to a wider segment of the market.*”

Amy Harris, Worldwide Broadband Services
2005-2009 Forecast, IDC

Before
(without NetEnforcer)



After
(with NetEnforcer)



Extensive Range of Features

Traffic Classification (per Flow)

- IP address (with IP range, list or subnet option, host name); retrieval via LDAP or text file
- Network protocols such as ARP, IPX, PPPoE; IP protocols such as ICMP, IGMP, RSVP and EGP; and TCP/UDP applications
- VLAN (802.1Q and 802.1p)
- ToS byte (DiffServ or IP Precedence bits)
- Time of day/week/month/year

Traffic Encapsulations

Control of encapsulated traffic such as L2TP, MPLS and PPPoE

Application Classification

- Hundreds of applications, including P2P apps such as BitTorrent, DirectConnect, eDonkey/eMule, Gnutella, Kazaa, Warez, WinMX and more
- Encrypted and HTTP tunneled applications
- VoIP protocols such as SIP, Skype and H323
- Instant messaging, including distinction between file transfer and chatting
- Email protocols
- Online gaming

Policy Enforcement

- Hierarchy of policy rules with outbound and inbound traffic management
- Minimum/maximum bandwidth enforcement per subscriber and application
- Ten levels of priorities
- Per flow guaranteed bandwidth, burst rate and CBR
- Maximum number of connections per VC/pipe
- Fairness between traffic flows, subscribers and applications
- Admission control

Network Security

- Access control (pass/reject/drop)
- Protection from DDoS attacks
- Control of number and rate of connections

Configuration

- Central management solution via NetXplorer
- IP configuration and setup via integrated LCD and keypad
- Remote policy configuration via CLI or web browser

Policy Management

- Policy management of multiple units from a single station with NetXplorer
- Easy-to-manage, single-table view based on catalogs
- Easy expansion of VCs and pipes (policies) to multiple subscribers
- Customer provisioned QoS via NetPolicy Provisioner (optional)

Monitoring and Accounting

- Central reporting system using NetXplorer for troubleshooting and traffic analysis
- Monitoring: protocol distribution, network demographics, top hosts, top VCs, top pipes, VC/pipe distribution, number and rate of connections, utilization, bandwidth usage with 30 second granularity, storage of historical data and drill-down capabilities
- Accounting of traffic per session with powerful reporter and CSV interfaces
- SNMP: support of statistics collection per VC/pipe

Fail-Safe Performance (No Single Point of Failure)

- Support of redundancy using two systems
- External fiber/copper bypass controlled by main board
- Dual 200W load sharing, hot-swappable power supplies, dual power feeds and redundant fans

About Allot Communications

Allot Communications is all about broadband traffic management solutions for intelligent networks. Designed for carriers, service providers and enterprises, Allot solutions apply deep packet inspection (DPI) technology to transform broadband pipes into smart networks. This creates the visibility and control vital to manage applications and services, guarantee quality of service (QoS), contain operating costs and maximize revenue. Allot believes in listening to customers, and provides them access to its global network of visionaries, innovators and support engineers.

Inspection, Visibility and
N
Broadband
Contained Network



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