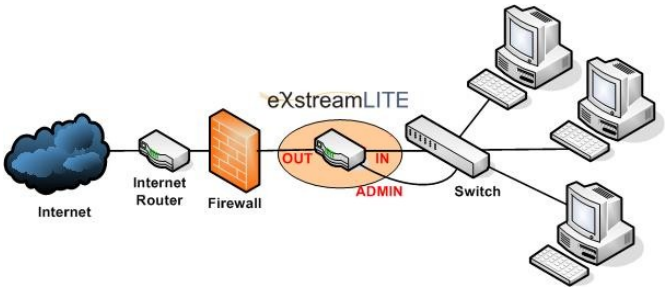
eXstreamLITE

Bandwidth Management for Everyone

Solution

eXstreamLITE is a robust, secure network device that ensures the optimal use of expensive Internet bandwidth through a unique blend of Internet traffic classification, bandwidth shaping and traffic prioritisation engines.

Installed on the perimeter of a company network, between the LAN and Internet router, **eXstream**LITE unobtrusively controls Internet traffic to ensure efficient use of all available bandwidth, utilising downloadable policy-based profiles. The eXstream device logically separates Local and International traffic, creating a highly efficient and manageable environment without compromising productivity.



eXstreamLITE combines the power of a full-featured and robust shaping engine, together with a simple and easy-to-use Web-based front-end from which a number of preconfigured shaping profiles can be selected. **eXstream**LITE offers all the advantages of traffic shaping without special knowledge of TCP/IP traffic.

Any company with a permanent Internet connection, including Diginet and ADSL, will benefit dramatically through the installation of an **eXstream**LITE device. The fusion of secure state-of-the-art Linux-based routing technology with superior bandwidth management processing and simple management interface, ensures that the **eXstream**LITE device delivers a superior value proposition.

eXstreamLITE forms part of the **eXstream** family of products distributed by Expertron. **eXstream**LITE provides a solution for companies requiring devices, which are simple to deploy and manage, that offer the power required to solve business challenges. It provides standard, tested traffic shaping profiles that will meet the requirements of most small to medium enterprises.

Features

eXstreamLITE facilitates three core functions:

- **Internet Usage Monitoring and Graphing**

  eXstreamLITE provides historic graphing of Internet traffic for the following periods: hour, day, week, month and year, which is stored for on-demand administrative access. This information is crucial when motivating and planning future bandwidth upgrades, policy reconfiguration and trend analysis.

- **Monitoring and Graphing Network Utilization**

  The integrated **eXstream**LITE administration interface incorporates graphical representation of top talkers and top listeners between the Internet and your network, as well as the applications they use, identifying causes of high congestion. The Management Interface also includes a list of visited web sites by employee.

- **Partitioning and Controlling Internet Bandwidth**

  eXstreamLITE partitions your Internet link into separately manageable streams of data based upon application type and protocol, each with its own limits and priorities. This ensures that slow, non-critical traffic does not interfere with real-time business critical applications. If a partition is not fully utilized, the excess bandwidth is automatically available to applications from other partitions. **eXstream**LITE makes it possible to enforce Internet-usage policies automatically without wasting any bandwidth. Standard management profiles are pre-loaded and these can be periodically updated from the **eXstream** web site as part of the software maintenance agreement.

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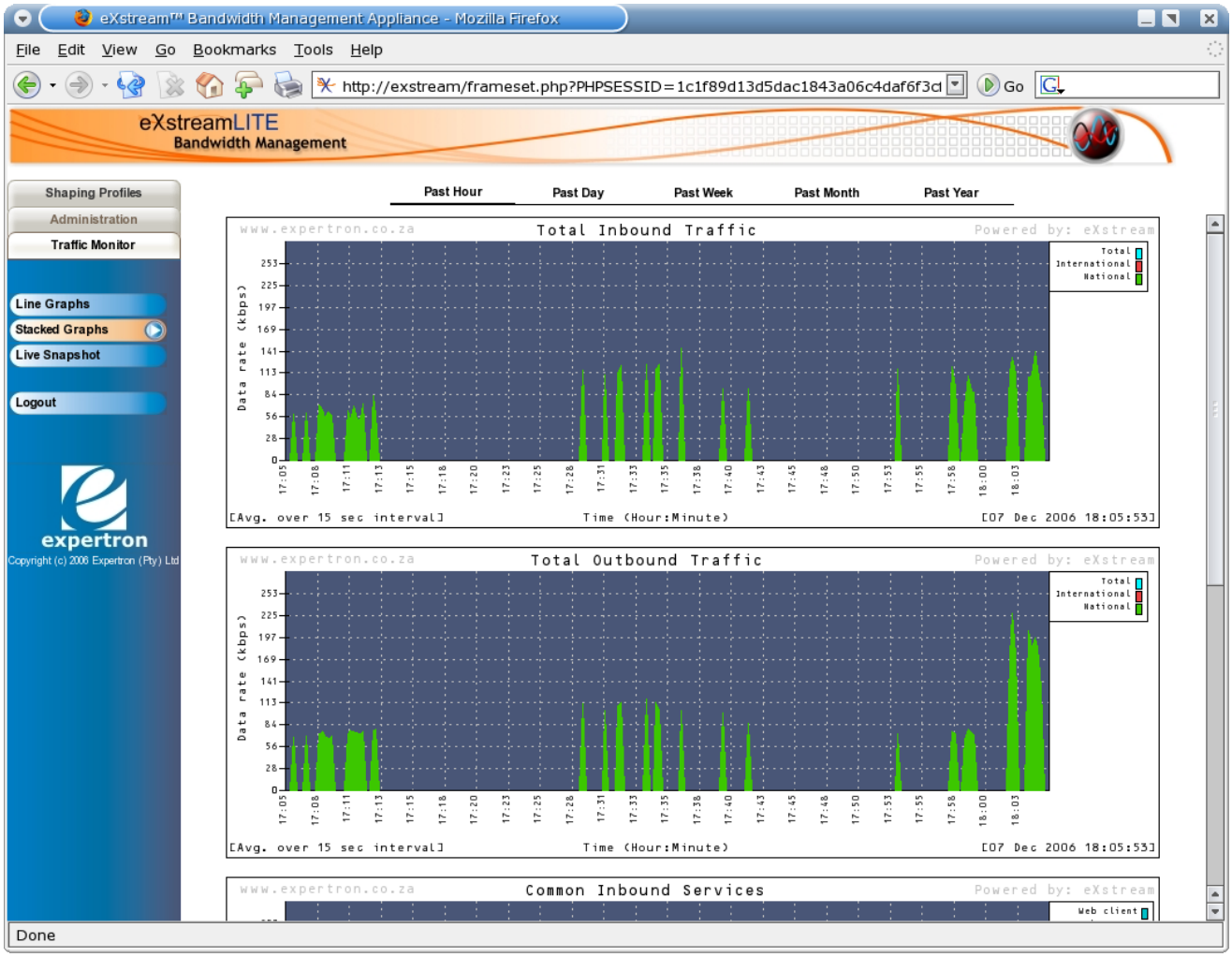
Interface Snapshot



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Specifications

Reporting	
Historic Traffic Analysis	Logging and graphing of bandwidth usage: Total National Traffic Total International Traffic Total Traffic, segmented by Application Average Response Time: Network delay Server reaction time Instant access the following graph periods: Past Hour Past Day Past Week Past Month Past Year
Real-Time Measurement	Live measuring and graphical representation of: Top Talkers [Inside] Top Listeners [Inside] Top Applications [IN-Bound] Top Applications [OUT-Bound] Top Web sites visited Average Network Response Time
eXstream Administration	
Graphical User Interface	Secure browser-based Interface Single Administrator login Password protected Automatic inactivity lock-out

Traffic Management	
Traffic Management Profiles	Standard preconfigured profiles provided Downloadable from the *eXstream* web site. Traffic management can be switched to *Passive Mode* Monitoring and graphing remain active
Link Partitioning	Separate partitioning of National and International links Sharing and bursting between partitions Guaranteed minimum bandwidth per partition Maximum sharing and bursting bandwidth per partition Traffic Priority per partition
Traffic shaping mechanisms	TCP/IP flow-based priority Host-based fair sharing Flow-based fair sharing FIFO
Hardware	
Technology	Small Form Factor Solid State Device for up to 512 kbps 1U 19” Rack Mount Appliance for up to 50 Mbps
Firmware	Linux-based Kernel
LAN	Dual Ethernet Interface, 10/100 Base-T LAN Bypass on power loss
Indicators	Power LED, Status LED ACT and Link indicators for network activity

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Standard Traffic Shaping Policy

Standard Traffic Shaping Profile	
Purpose	Prevents bulk traffic, such as email, file downloads and Peer-to-Peer, from slowing down interactive traffic such as web browsing and remote logins.
Target	Small to medium sized companies, security villages and flats with a permanent Internet Link up to 2048 kbps.
Main Features	• Network control traffic receives priority. This ensures continued smooth operation of essential network functionality. • When the line becomes congested, email and file transfers are limited to ensure that these do not interfere with web browsing. • All limits are “soft limits” that are automatically adjusted to ensure that no bandwidth is ever wasted.
National Link Speed	
Incoming	64 kbps to 2048 kbps unshared
Outgoing	64 kbps to 2048 kbps unshared
International Link Speed	
Incoming	64 kbps to 2048 kbps unshared
Outgoing	64k bps to 2048 kbps unshared
Shaped Traffic	
HTTP client	Web browsing and downloads
FTP client	Downloads
Email clients	POP/IMAP/etc for on-line email
Interactive traffic	Terminal Services, Novell Core Protocol, Telnet and SSH for remote system administration
HTTP server	Self hosted web server
FTP server	Self hosted ftp server
Email server	SMTP for self hosted email servers

Traffic Partitioning	
Priority Traffic [10%]	All TCP control packets Short and infrequent ICMP requests
Interactive Traffic [10%]	Terminal Services Novell Core Protocol Telnet SSH
Web Browsing + Email Access [40%]	All web browsing (HTTP and HTTPS) Email access (POP and IMAP clients)
Downloads + P2P [15%]	All HTTP downloads All P2P downloads All FTP downloads All SCP downloads
Email Transfer [20%]	Off-line email (SMTP for self-hosted email server)
Other [5%]	Unclassified traffic