

PRX Traffic Manager

Datasheet
PRX-20

Benefits

- Reduced communication and infrastructure costs
- Comprehensive network visibility
- QoS management per application and subscriber
- Restrict unauthorized network access
- Tiered service and pricing models
- Network policy management



PRX Traffic Manager is a comprehensive and cost-effective bandwidth management solution enabling operators to monitor and control network traffic per application and per user/subscriber. It detects all major applications – including P2P file sharing, instant messaging, media streaming and Internet telephony – with a combination of layer-7 deep packet inspection (DPI) and behavioral traffic analysis. The integrated QoS management allows prioritization, shaping and blocking of classified traffic. Extensive accounting features provide in-depth application- and user-aware network visibility.

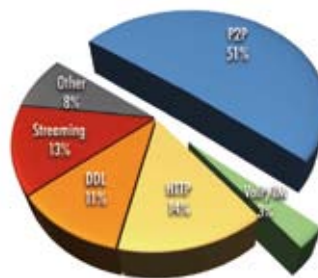
The Bandwidth Challenge

Bandwidth intensive applications such as peer-to-peer-based file sharing (P2P) use up a disproportionately high amount of network resources. This drives up communication and infrastructure costs and adversely affects the quality of important business applications such as ERP and CRM systems as well as next generation applications like Internet telephony or video on demand.

P2P networks are used on a massive scale to distribute copyright-protected content, which can cause legal consequences for network operators. Many file sharers are also using one-click file hosting services that provide direct download links to the shared content (DDL). Specifically ISP and educational networks often encounter a small percentage of heavy users consuming a large proportion of the available bandwidth.

Uncontrolled and unmanaged availability of P2P, Internet telephony (VoIP, Skype), instant messaging (IM) and video streaming applications are known to pose serious security threats and decrease staff productivity due to their often non-work-related nature.

Traditional Internet gateway products such as firewalls often fail to recognize these applications as they frequently use stealth techniques like protocol obfuscation and encryption to evade detection. In many instances such systems are overwhelmed by the large number of parallel connections that are opened by these applications.



Source: ipoque P2P Survey

Key Features

- Layer-7 protocol detection with DPI and behavioral analysis
- VoIP, P2P, IM, media streaming, Web, e-mail protocol support
- Detection of encrypted protocols like Skype, BitTorrent, eDonkey/eMule, Winny, QQ
- Subscriber-level bandwidth and policy management
- Up to 20,000 packets per second
- 100,000 concurrent connections
- Up to 15,000 new connections per second
- Permit legal and block illegal file sharing
- Seamless integration as transparent bridge in existing networks
- Regular signature updates
- Web GUI and CLI for simple and flexible administration
- No wear and tear parts for high reliability
- Comprehensive network statistics

PRX Traffic Manager Solution

PRX Traffic Manager uses ipoque's layer-7 deep packet inspection and behavioral analysis technology to detect even the most elusive protocols, no matter if they use advanced obfuscation, port hopping, encryption or other techniques to hide from detection.

PRX Traffic Manager provides comprehensive and detailed insight into the network's per-application and per-user traffic. This information can be used to define bandwidth management rules to prioritize, shape, block and log individual applications' traffic either in total or for individual users or user groups.

Operators can offer tiered network service and pricing models along with flexible and fair bandwidth allocation. Premium applications can be prioritized and bandwidth-intensive P2P or streaming applications can be limited.

PRX Traffic Manager provides a unique white listing feature for BitTorrent trackers to allow providers to offer legal P2P services with no copyright infringements.

Comprehensive Protocol Support

With support for over one hundred protocols covering hundreds of applications, PRX Traffic Manager is able to detect and manage the large majority of the overall network traffic. This includes all standard protocols used for Web, e-mail and file transfer as well as all important protocols used for P2P file sharing (e.g. BitTorrent, eDonkey, Gnutella), Internet telephony based on Voice over IP (VoIP) are supported, including (e.g. SIP, Skype and, H.323), media streaming (e.g. Flash, RTP, RealMedia), instant messaging (e.g. IRC, MSN, Yahoo), tunneling (e.g. SSL, OpenVPN, Tor) and online gaming (e.g. Half-Life, World of Warcraft, Xbox). The availability of phone service can be selectively controlled per protocol, user and VoIP provider. The integrated QoS functionality of PRX Traffic Manager can enforce priority and guaranteed bandwidth for all applications using these real-time applications protocols. Detailed call logging functions can be activated to analyze the service usage.

Simple Installation and Operation

PRX Traffic Manager operates as a transparent bridge for a seamless integration into existing network environments. The Web-based management console allows simple configuration.

Statistics, Logging and Accounting

The management console provides graphical usage statistics per link, user group, application and application class for configurable time intervals. A number of predefined reports help to regain control over the network, detailing the network usage from different perspectives.

All statistical data can be automatically exported at different aggregation levels (i.e. per link, per user, per user group) for subsequent processing in external accounting systems. Optional application-level connection logging, either internal or to an external syslog server, provides fine-granular service usage information.

Support

Flexible support options include regular signature updates, e-mail, phone and remote installation support. 24x7 support with 4 hours reaction time is available.

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Performance

Throughput (Mbit/s)	20
Packet Rate (Packets/s)	20,000
Number of Active Flows	100,000
New Flow Rate (Flows/s)	15,000

Configuration Limit

Subscribers	256
Policy Classes	10
Active Rules per Subscriber	20
Active Rules per System	2,560
Subnets	100
Subnet Exceptions	3
Profiles	5

Interfaces

Network Ports (Int./Ext.)	2x 10/100Base-T
Management Port	1x 10/100Base-TT

Protocol Support Includes

Peer-to-Peer (P2P) Protocols	AppleJuice, Ares, BitTorrent, DirectConnect, eDonkey, FastTrack, Filetopia, Freenet, Gnutella, Manolito, Mute, SoulSeek, WinMX, XDCC, QQ
Voice over IP (VoIP) Protocols	H.323, IAX, SIP, Skype
Instant Messenger (IM)	IRC, Jabber/Google Talk, MSN, Oscar, Yahoo

Optional Modules

Streaming Protocols	Flash, Joost, MMS, MPEG, Real Media Stream, Quicktime, Windows Media Stream
Standard Protocols	DDL, FTP, HTTP, IMAP, POP3, SMTP, Usenet
Gaming Protocols	XBOX, World of Warcraft, Steam, HalfLife2
Tunnel Protocols	HamachiVPN, SoftEthernet, SSH, TOR, VPN-X
Advanced Reporting	subscriber reporting
IP Control	subscriber traffic management

Hardware

Size (W x H x D in mm)	155 x 25 x 155
Weight (kg)	1
Power	100-240V, 50/60Hz, 1.5A, 60W, external, passive



PRX Traffic Manager
- Basic Deployment