

**For service providers, colleges, office centers, hotels and other organizations that purchase and offer bandwidth:**

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## The easy, economical way to control bandwidth use

**Assures customer satisfaction – without adding bandwidth!**

### NetEqualizer:

- **Installs in minutes**
- **Controls excessive bandwidth use by non-priority users**
- **Ensures high quality for VoIP and priority users**
- **Dramatically reduces service calls**

Designed for voice and data networks, NetEqualizer appliances provide an economical, non-intrusive, plug and play solution that maintains high levels of customer satisfaction even during peak usage.



### NetEqualizer installs without:

- *Changes to network infrastructure*
- *Traffic pattern analysis*
- *Policy libraries*

“NetEqualizer worked wonderfully for keeping our traffic balanced and under control during the three-day Webbit expo. We were on a 34MB trunk with 1200 users.”

*Trnepal Webbit Network Administrator*

### What makes NetEqualizer so economical – and easy to use

NetEqualizer simplifies a very complex process by shaping traffic based on built-in fairness rules. It looks at current usage, including traffic levels and application types, and does not require manually-set policies.

When the network is congested, NetEqualizer's fairness algorithm favors business class applications so that large downloads don't slow down latency-sensitive applications such as VoIP, video as well as ERM, CRM and other business critical applications.

NetEqualizer adds latency to non-priority flows that use excessive bandwidth over a period of time. If the flow continues to use too much bandwidth, its latency is further increased, automatically. It's easy to exempt latency-sensitive, business critical applications that need substantial bandwidth.

## APPLICATIONS

### Improving QoS without recurring cost

The goal of any service provider is to relieve bandwidth congestion and improve response time with adding bandwidth or incurring other on-going

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costs. NetEqualizer does all this, without changes to existing infrastructure or the development of policy libraries.

### A good user experience for everyone

NetEqualizer slows down the heaviest users as networks become more congested. It keeps track of all active users, including how much bandwidth each is using, how long they have been using it, and how much of the total network capacity is being used. It then applies “intelligent” rules that take all these factors into account.

### Enabling QoS for VoIP

NetEqualizer allows operators to make sure that latency-sensitive voice traffic receives the highest priority. It makes control decisions dynamically, prioritizing and shifting bandwidth between application and connections as network usage rises and falls.

### Enabling QoS for priority customers

For providers that are selling tiered services (platinum, gold silver, etc) or have customers with critical bandwidth needs, making sure that priority users have their requisite bandwidth during peak usage is an on-going challenge. At the same time,

operators don't want to drop a voice call because a priority user is downloading a massive file. NetEqualizer imperceptibly slows non latency-sensitive activities, avoiding congestion that would impact more sensitive activities.

## FEATURES

### Bandwidth limiting

NetEqualizer provides bandwidth limiting features by:

- Fairness, favors bandwidth for web browsing, voice, chat and e-mail
- Host, (supports 1000's of individual limits)
- Subnet
- MAC address
- Port
- VLAN

### Models

**NetEqualizer is available in a range of configurations from 2Mbps up to 5Gbps**

### Reporting

NetEqualizer offers key reporting features, including the ability to view traffic by application, host, or port.

### Firewall capabilities

NetEqualizer is protected with a built-in firewall.

### Connection limits

Connection limits allow customers to protect their networks from malicious activities, including:

- Worms that can hijack computers and quickly overwhelm networks with traffic storms
- p2p applications that bog down traffic and render firewalls useless if left unchecked

With a single command, a system-wide connection limit can be set that applies to all hosts, external or internal to the network. If any host starts sending large numbers of messages, it will automatically be contained before causing a wide scale brownout.

Handling network overloads from p2p applications can be labor intensive. But NetEqualizer's connection limit feature prevents any single host from opening more than a set amount of connections.

### Content filtering

NetEqualizer appliances provide content filtering features that allow customers to block and control inappropriate material, whether outbound or inbound, including p2p overloads.

NetEqualizer provides bandwidth management capabilities for scores of applications, including Aimcontent, Cisco IP phones, FTP, KAZAA, Nortel, SMTP, Altigen, Citrix, Gnucleus, LimeWire, NEC, SIP, Aspire, Counterstrike, H323, Morpheus, POP3, Swapper, Avaya, eDonkey, HTTP, MsnMessenger, Realaudio, Toshiba, Bearshare, GNUTELLA, IMAP, Music Match, RealPlayer, UDP bittorrent, Emule, Iwatsu, MVP210, Shore Tell, Vonage and WinMX.

Built-in flexibility allows network administrators and operators to change all settings in real-time, with no affect on network service quality. Organizations requiring 100% network uptime can configure NetEqualizer for redundancy, with two NetEqualizer appliances running in parallel.

For voice customers, NetEqualizer has the ability to provide priority for all major IP PBX products and major Vendor Specific VoIP applications (VSVAs).

### About APconnections

APconnections (<http://www.apconnections.net>) is a privately-held company founded in July 2003 and based in Lafayette, CO. The company develops traffic shaping appliances based on Linux and Open Source technology. APconnections released its first commercial offering in July 2003, and since then over 1000 unique customers around the world have put the NetEqualizer family of bandwidth shaping products into service. NetEqualizer products can be found at ISPs, WISPs, major universities, Fortune 500 companies, SOHOs and small businesses on six continents.