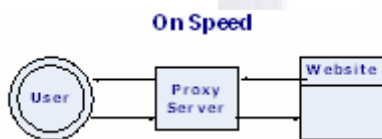


On Speed

by: **Stephen Cogdon**, Phd
Researcher Pathfinder Projects Ltd.

OnSpeed claims to speed up an Internet dial-up connection by up to 10 times, a broadband connection by up to 5 times and a 3G or GPRS mobile connection by up to 8 times.

London based OnSpeed works by diverting the user's Internet traffic through its set of proxy servers located in the UK. These servers send and receive the user's data across their own high-speed broadband links to and from the user's originally intended destinations. Information received by the servers for delivery to the user is compressed using a series of algorithms based on a patent approved technology ready for passing onto the user.



OnSpeed terms this technology Content Sensitive Compression (CSC). Software at the user end then decompresses the receiving data and rebuilds the information for presenting to the user. The information is reproduced in its original format such as a web page, email, document or image. Information that is already compressed such as an audio or video file will still be exposed to CSC, but with less effect than uncompressed data.

Information is presented to the user as a whole rather than as fragments. That is, a web page will appear after a minimal delay for decompression in completion rather than incrementally. The user can set the level of compression required which will effect the quality of the information received. Of course, actual Internet

speed remains the same, but as more information is being received due to it being compressed, then the effect of CSC is significant. OnSpeed is primarily aimed at Internet users with a dial-up connection. There is an improvement in performance for broadband users, but there is a significant improvement of up to 10 times for dial-up users. There is also a clear improvement of up to 8 times for 3G or GPRS mobile connections.

This is useful for roaming PC users with a mobile connection who require their Internet traffic to be delivered promptly wherever they maybe in the world. As a mobile provider charges for information downloaded and uploaded OnSpeed reduces this cost as data is received in a compressed form and so in real terms there is less of it.

OnSpeed claim a reduction in cost of up to 90% as a mobile provider charges by the Mb downloaded.

As an intermediary between a user and the recipients they communicate with OnSpeed will always be open to issues of privacy and security, however much they claim to be trustful. OnSpeed is ideal for the casual home user, but maybe viewed with an air of caution by the professional business user who wishes to send sensitive information around the Internet.

There is also the realisation that OnSpeed maybe vulnerable to malicious attack. This implies users who will attempt to disrupt and manipulate the OnSpeed proxy servers by overloading the servers with data or by requesting an intentionally rogue website which will return corrupt or suspicious data. Like all known servers OnSpeed is vulnerable to a denial of service attack whereby the servers are attacked by malicious users who intend to halt their operation.

Having raised issues of doubt however, the authenticity of OnSpeed can be confirmed by the number of competing technologies available in America which have been termed Internet accelerators. These are ActiveSpeed, Propel and Proxyconn and in integrating themselves with ISPs they tend to provide their own protection against a denial of service attack.

Proxyconn claim that its acceleration servers are sold with security extensions, including virus or worms impact mitigation. This feature is targeted for large and medium size ISPs and ISPs implementing the Proxyconn acceleration system are now able to protect themselves against attempts to disrupt their service to users.

In America the majority of dial-up users already enjoy accelerated Internet service as do dial-up users in the UK with acclaimed ISPs such as Tiscali. OnSpeed is a recognised product of much benefit to both the user and the ISP.

Pathfinder Projects Ltd.

Address:

New Head Office:

The Sussex Innovation Centre
Science Park Square
University of Sussex
Falmer
Brighton
BN1 9SB

Telephones and Fax:

New Head Office:	01273 470 785
Administration:	01273 472 504
Fax:	08452 805 423

Internet:

E-mail:	info@pathfinderprojects.co.uk
Website:	www.pathfinderprojects.co.uk