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Tech Overview : Recording Users that Access the Internet via an Internal Proxy Server

To prevent the misuse of network resources by employees and to provide network security, many businesses install the Nusoft Internet Recorder. They may also choose to utilize firewalls. However, if the level of security is set too high, then it can affect the Internet service of users. Another option that companies have is to incorporate an internal proxy server into their network.

A proxy server accumulates all the Internet resources, such as web pages, etc. previously accessed by users. The next time any user wishes to access the same resource, the proxy server will retrieve it from its cache without having to access the Internet directly. This results in an increase in speed to access the resource and removes some of the burden on the company's available WAN bandwidth.

To deploy the Nusoft Internet Recorder when the internal network has a proxy server, the device must be connected to a hub located between the proxy server and LAN users. Hubs broadcast all packets across each of its ports, including to the port that the device will attached to, and it is for this reason that a hub and not a switch must be used. Thus the Internet Recorder will be able to record all web pages by users accessed through the proxy server.

Two scenarios now exist for the Internet Recorder. The first scenario is when the device records users' online activities via the proxy server. This provides the IT administrator with comprehensive records regarding the users' online activities. The second scenario is from records obtained when the proxy server requires access to the Internet. This can provide information regarding the operation of the proxy server. However if this information is not required to be recorded then the IT administrator can add the proxy server's IP address to Nusoft Internet Recorder's "Ignored User List".

Nusoft Internet Recorder is able to accommodate a network's proxy server. As a result, the network can still receive effective network monitoring and the benefits of proxy server.
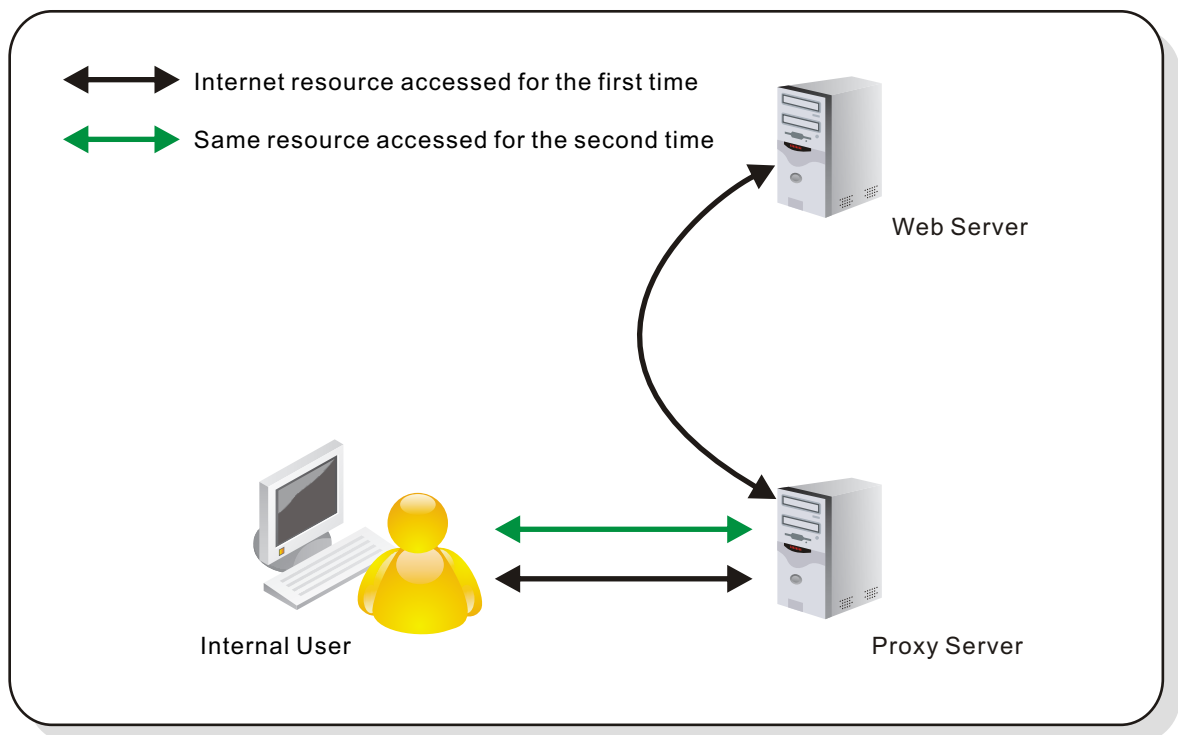

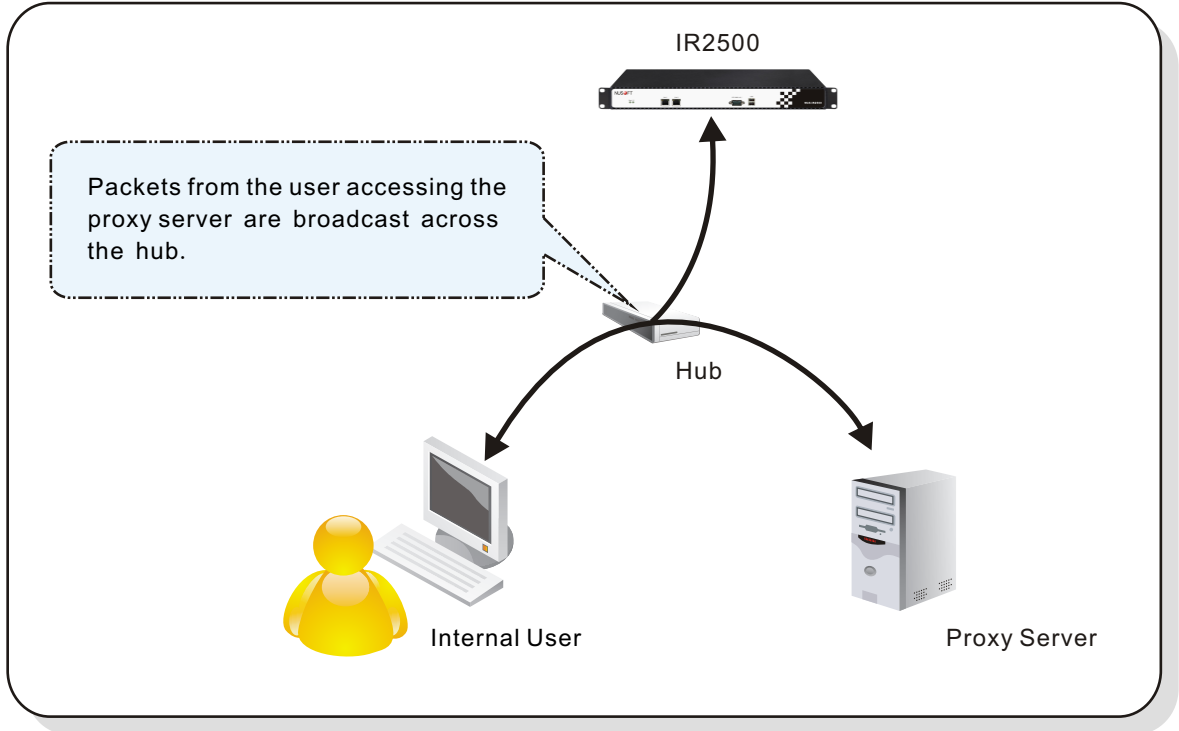Figure 1 An Internal User Browsing the Internet via a Proxy Server

Figure 2 Packets Sent from / to the Proxy Server are Broadcast to NUS-IR2500

Product News : Reducing Cyberslacking and Productivity Losses

The growth of the Internet and its embracement by businesses across various communication and operational facets has resulted in a constantly increasing number employees having readily available Internet access. The Internet is like a door to the world sitting on your desktop. For employees, it is this enticement and the ease at which they can discretely engage in the Internet for non-work related activities, making cyberslacking a common occurrence. This behavior presents many difficulties for managers due to its difficult detection even when within close proximity.

In the past, employers had to deal with employees' committing time-wasting activities of a different nature, such as newspaper reading, non-work related chat and phone calls, etc. This was very easy to curtail, as it was more obvious. However, employee's cyberslacking often look busy. There are even programs designed to further conceal employee's engaging in cyberslacking such as Ghostzilla. This Internet browser embeds itself in programs such as Microsoft Office Word or Outlook to give the appearance that they are reading emails or editing documents instead of surfing the net.
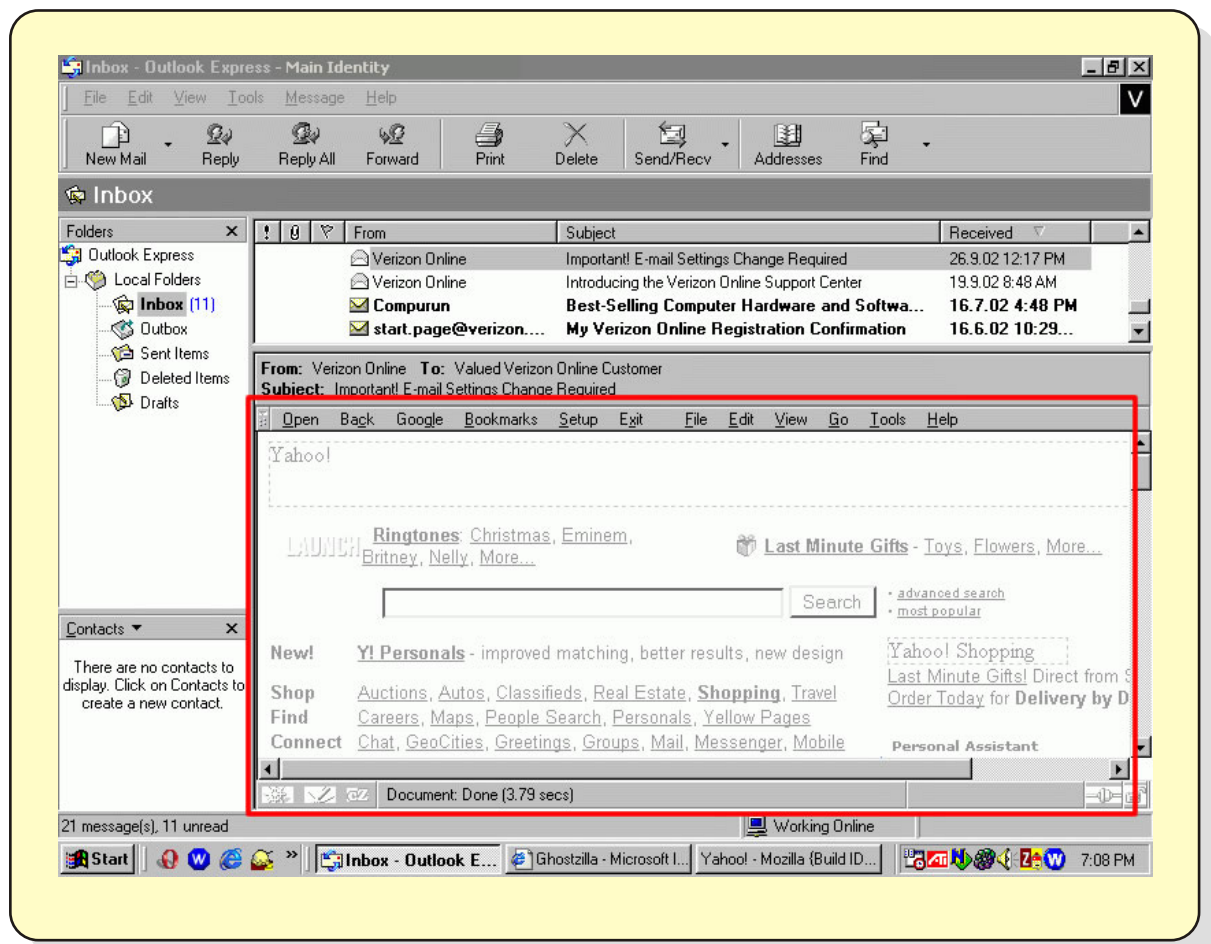

Figure 3 An Internet Browser Concealed (Embedded) in MS Outlook Express

A Hidden Web Browsing Application Embedded in Outlook Express

Some alarming statistics for employers have revealed that:

-70% of employees conduct some form of non-work related activity during business hours
-Amongst these employees, the majority conduct non-work related activities in excess of one hour. Employees spending 30 minutes on these activities constituted 50%, 1-2 hours 30% and 2-3 hours 10%.
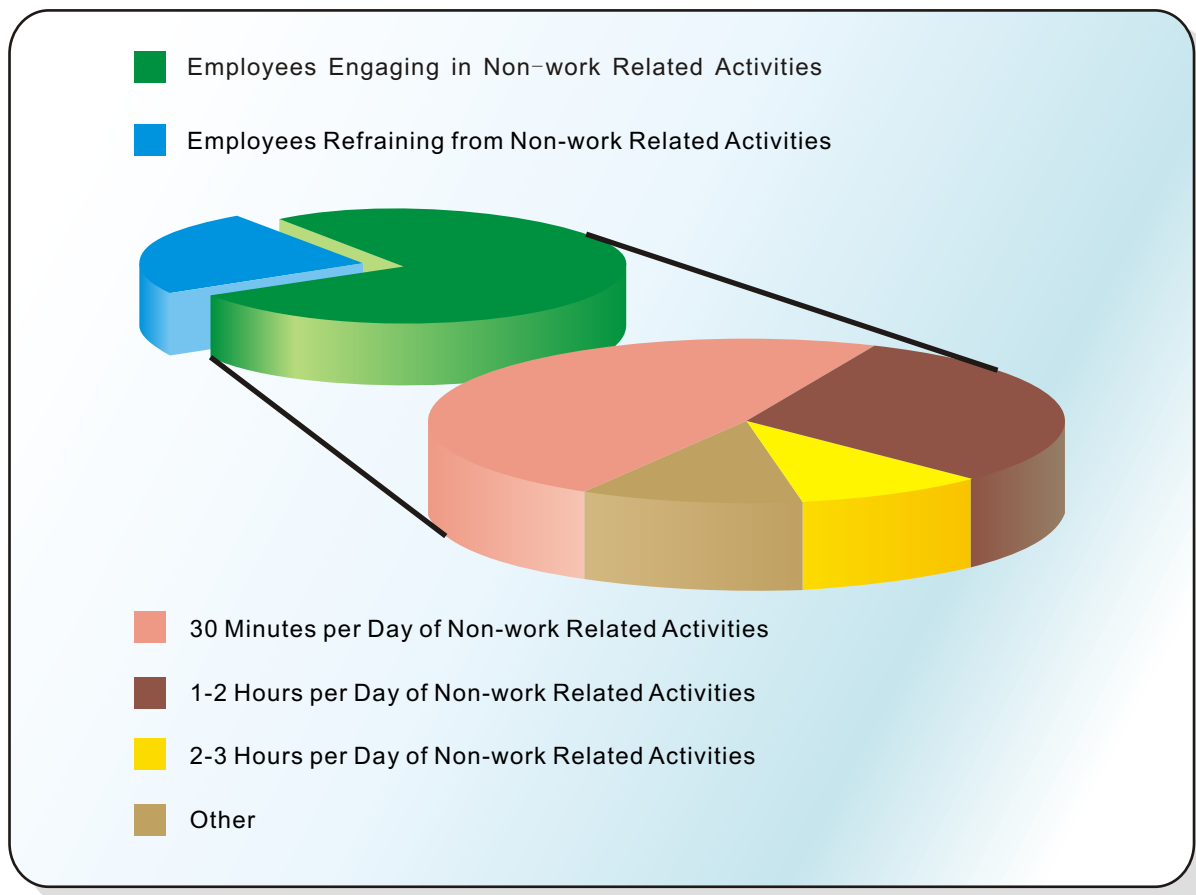

Figure 4 Proportion of Employees' Engaging in Non–Work Related Activities during Business Hours

There are various reasons behind the causes of why employees engage in cyberslacking, such as boredom, a light workload, a lack of time to conduct their own personal activities, etc. However, one of the root causes is the lack of an effective surveillance system to monitor the network usage and curtail this behavior.

The Nusoft Internet Recorder provides the ideal solution to this problem. IT administrators can access its user interface to monitor and obtain an instant insight into the employees' online activities, including websites browses, instant messaging, emails, etc. The result is a dramatic increase in productivity for businesses.