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Tech Overview : Recording Employees' Online Activities via HTTP

Employee productivity is obviously a key issue for business managers. As the power of the Internet continues to provide various forms of services conveniently aiding communication, it has unfortunately bought about a downside. Employees' misuse of the service has resulted in a decline in productivity. Aside from just informing employees about the network use policy, businesses can also choose to install Internet recording devices to monitor their employees' online activities.

Instant messenger software has not just been the main avenue for employees to misuse and waste precious working hours. HTTP encompasses a range of different services aside from just web page browsing, including forums, chat rooms, multimedia file downloads such as MP3, MPEG, AVI, etc. The majority of Internet recording devices on the market are only capable of recording URL addresses visited and are incapable of providing complete detailed records. Consequently, the Nusoft Internet Recorder was designed to resolve these deficiencies and provides compressive records of web page browsed, HTTP uploads/downloads and forum posting.

Website Browsing Recording

By utilizing the Nusoft Internet Recorder, managers are able to easily search through records to obtain website details such as the time visited, URL address, website title, etc. It also provides a feature to view the recorded contents of the webpage visited, such as the text, images and links simply via the user interface.（Figure 1）
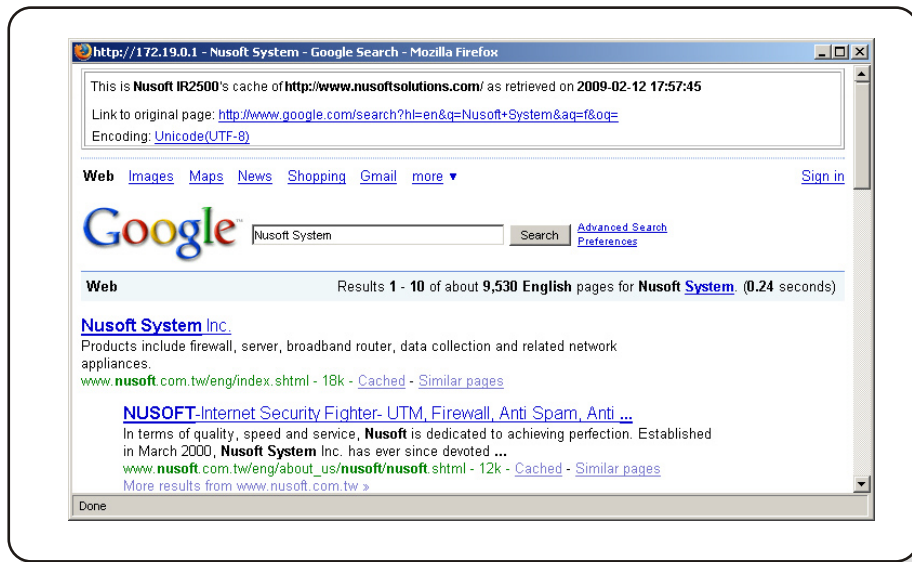

Figure 1   An HTTP Screenshot Captured by the Device

HTTP File Uploading/Downloading Recording

Apart from FTP or P2P, HTTP represents the most commonly used protocol for transferring files. The Internet recorder is capable of recording details such as the name, upload/download direction, source address, from files transferred such as pictures, compressed files, program files, MP3 files, etc.）IT administrators can easily view the file by simply clicking on the link supplied in the log.（Figure 2）

		Date/Time▼	User Name	Web Site▾
☐	⬆			
☐	⬅	12/27 19:00	172.19.20.9	⬆ iframe.txt
☐	➡	12/27 19:00	MailServer	⬆ Snap1.jpg
☐	⬅	12/27 19:00	172.19.20.9	⬇ u0607g.xml.dif
☐	⬅	12/27 18:14	MailServer	⬇ u0607g.xml.dif
☐	⬅	12/27 11:25	172.19.20.9	⬇ u0607g.xml.klz

Figure 2 Uploaded and Downloaded Files Logs

Recording Posted Forum Articles

Chat rooms, blogs, forums are some of the most commonly used avenues for viewing various information. However, these avenues can also be used to post advertisements, abusive content aimed at either individuals or the company. Due to the use of nicknames, determining whom the culprit is not always obvious. With the help of Nusoft Internet Recorder's HTTP recording capabilities, the poster of such content and their associated IP address or hostname can be determined.

	Nusoft Internet Recorder	Third-Party Internet Recording Devices
Website Browsing	Website title, URL address, time, content of the website (images, text, links, etc. ）	URL address, time
File Downloading and Uploading	File name, source IP	✕
Article Posting	Source IP, time, content of the whole article	✕

Table 1 Recorded Information Comparison Chart

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Product News : Internet Recorder and Employee's Privacy

It is necessary for businesses to record email and instant messaging correspondence if they are to preserve their intellectual property and curtail employee productivity losses. However, employee privacy issues have arisen as Internet recording devices are able to extract names, account numbers, instant messenger conversations, emails, browsed webpages, images and other information from packets that pass through it. These details might identify a specific individual's identity, marriage status, family information, health, activities, etc.

If companies were to abandon installing Internet recording devices to avoid uncovering this personal information, they will be placing their business under risk from their own intellectual property being exposed and exploited.

Complying with laws

In certain countries, it is legal for enterprises to monitor employees' online activities only if the employees have been informed beforehand that they will be subject to monitoring.
In addition, the records must strictly only be used for protecting business confidentiality i.e. it is illegal for enterprises to disclose employees' personal information to another party. We recommend enterprises take advantage of the Internet Recorder's Group Administrators* feature to prevent records from being viewed by a third person. Then, business confidentiality will be protected without invading employees' privacy.

* Hierarchical management can be achieved by the means of group administration. When there are many departments or sections in an organization, the system administrator can give the permission to group administrators for them to observe the service logs of their own designated group to practice an efficient top-down management approach.