Tech Overview : Nusoft Internet Recorder Accommodates Your Network

From the two available deployment modes offered by the Nusoft Internet Recorder, Sniffer mode and Bridge mode, Sniffer mode is the most widely preferred option for businesses. This is due to Sniffer mode's ease and speed of installation.

However, a few cases have been reported of being unable to access the management interface, the following reasons might be the cause:

1. The mirror port on the core switch is configured to only duplicate packets. Thus, the IT administrator will not receive any response packets from the device via the core switch's mirror port and consequently will be unable to access the management interface.
2. The attempt to access the Nusoft Internet Recorder fails due to a network disruption resulting from connecting both ports on the device to the core switch (port 1 to mirror port and port 2 to any port available), which forms a closed-loop system causing packet loops.

To resolve the above problems, Nusoft Internet Recorder now has come up with the solutions to them.

Taking the NUS-IR2500 as an example, the IT administrator can choose from the following settings in the device's management interface:

1. Bridge mode: When enabled, both ports on the device will able to send and receive packets simultaneously.
2. Sniffer mode: When enabled, the device will distinguish between its two ports as follows:
   Port 1 (for traffic mirroring) – will exclusively serve for the core switch's mirror port. It will receive all packets duplicated by the core switch's mirror port. However, it will be unable to respond to any packets (including ARP packets).
   Port 2 (for system management) – will be designated as the management port. The port will permit packets to be transmitted and received, allowing the IT administrator to access the management interface via this port.

If the core switch's mirror port is not capable of receiving packets, then the device's management port (i. e., port 2) will have to be utilized to access the device's management user interface. The independent nature of the device's ports prevents any packet loops from occurring. (Figure 1)

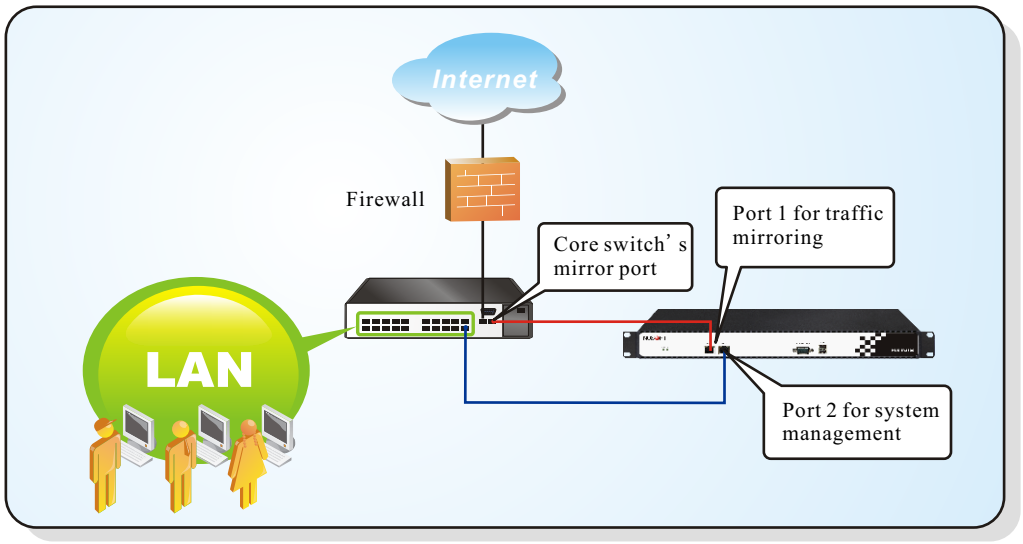

Figure 1 Sniffer Mode Deployment

When the IT administrator wishes to login to the NUS-IR2500's management interface, the core switch will send packets to the device's management port. The device's port 1 will not respond to any packets and hence no packet loop problems will occur. This mode effectively accommodates any core switches whose mirror ports are unable to respond to packets.

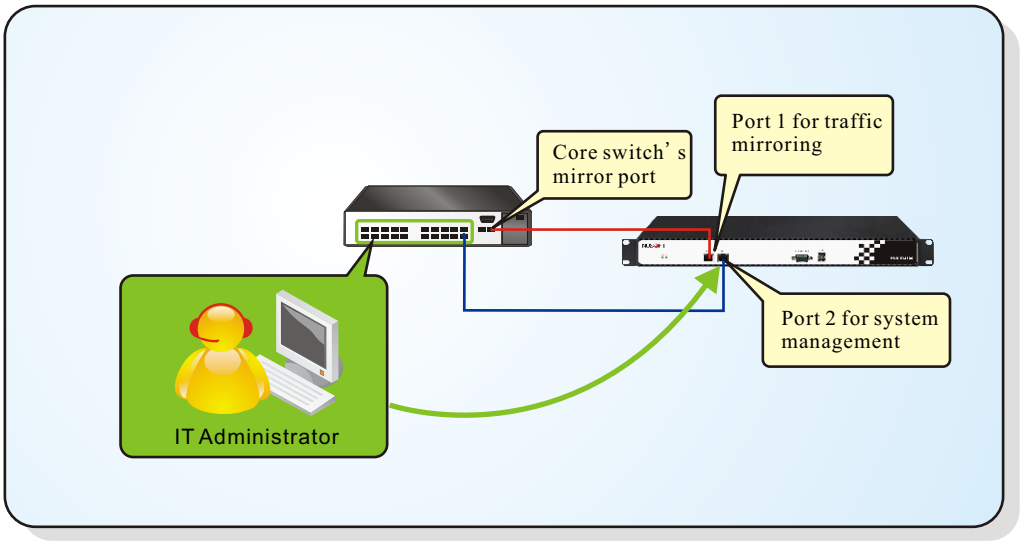

Figure 2 IT Administrator Accesses the Device's User Interface

Product News : Examination of Third-Party Internet Recording Devices' Features

As businesses strive to remain competitive, they embrace new technologies. This led to the integration of the Internet across many different facets of a business's operations. Now that employees have readily access to this technology, an alarming number use it for non-work related activities. As an attempt to combat this behavior, an increasing number of businesses install Internet recording devices. However, many lack the proper design to accommodate the range of needs of businesses.

The following table displays a comparison between third-party Internet recording devices and the NUS-IR2500:

	Nusoft Internet Recorder	Third-Party Internet Recording Devices
Product Design	1. Hardware-based platform providing efficiency and quality. 2. A full range of blocking and recording capabilities with traffic flow analysis.	Typically divided into two categories: 1.Hardware-based: built around a firewall with a small range of recording functions. 2.Surveillance software: provides only a limited range of functions.
HTTP Page Recording	1. Analyzes packets to provide detailed records. 2. Possess HTTP proxy server recording. 3. Provides details of a web site such as title, URL, contents and the associated user who browsed it.	No HTTP proxy server recording support and web site recording capability is limited.
Email Recording	1. Can record the sender, recipient, content, subject, attachment file, etc. 2. Multiple language support without the need to modify the language.	No support for multiple languages; the language has to be adjusted manually.
Web-Based Emai Recording	1. Supports a wide range of common web-based. 2. Signature definitions are automatically updated by the device.	Only creates snapshots of the web-based emails and not able to accurately record the contents of an email.

	Nusoft Internet Recorder	Third-Party Internet Recording Devices
Instant Messaging Recording	1. Supports the commonly used instant messaging software. 2. Records are based on each individual participant. 3. Multiple languages supported.	Records are based on time. Individual participants cannot be distinguished from each other.
FTP Recording	1. Records the hostname, account information, file information, etc. 2. Transferred files can be backed up and stored on the device for archiving and auditing needs.	Unable to record the hostname and account information; also not able to back up transferred files for auditing needs.
Search Features	1. Email (both web-based and regular):Uses keywords to search based on the content, sender/ recipient, subject, attachment file name, etc. 2. IM: Uses keywords to search based on the username, IM account name, participants, conversation contents, transferred files, authentication name, etc. 3. HTTP: Uses keywords to search based on the title of a website, username, and contents.	1. Regular email: Unable to search based on the content or attachment file name. 2. Web-based email: Uses snapshots to record emails and is unable to search based on the recipient, sender, subject, content, etc. 3. IM: The majority is only capable of searching based on the account name. 4. HTTP: Merely able to search based on the URL.
Traffic Flow Statistics	The device is able to record and classify packets according to eight commonly used services (e.g., HTTP, instant messaging, etc.) based on a designated time duration.	Produces records based on single time duration and is unable to record all the services required to prevent any network threats.

	Nusoft Internet Recorder	Third-Party Internet Recording Devices
Backup Mechanism	1. Records can be set an expiration time. They will be deleted when expired. 2. Provides automatic and manual remote backup. 3. Records can be viewed via the management interface.	1. No remote backup supported. The majority relies on CD/DVDs to back up data. It is not only costly but also inconvenient to retrieve the desired records. 2. It requires the interruption of recording and a manual operation.
Anomaly Flow Detection	Inspects each user's traffic flow automatically. Once detected, it can be instantly blocked (requires Bridge mode), together with an alert sent to the IT administrator.	Provides an alert to the IT administrator, but is unable to perform any anomaly flow blocking.