



## Tech Overview : Hard Disk Capacity Management

The Internet is firmly established as one of businesses’ major communication avenues. Consequently, Internet recording devices can quickly run out of storage space as they try to capture the vast amounts of data obtained from employees’ online activities. Once their inbuilt storage has reached its capacity, they delete old records first.

### Nusoft’s Service Classification System

The majority of Internet recording devices on the market lack a proper classification and storage system for this data. To address these deficiencies, Nusoft Internet Recorder's packet analysis capabilities examines each packet passing through the device and makes a classification based on the service e.g. FTP, HTTP, instant messaging, etc. This classification system allows the device to provide a storage time setting, so that each recorded service can be configured a maximum storage time in days.

Based on statistics accumulated by the device, it also displays the average traffic flow per day for each of the services. In addition, each service displays an “Estimated Storage Utilization Percentage” based on the average daily traffic flow statistics and the required storage time. IT administrators can now manage the devices storage capacity more effectively. The “Estimate Storage Time” is calculated by multiplying the “Avg. Traffic / Day” by the “Storage Time” .

Service	Duration (YY/MM/DD)	Avg. Traffic / Day	Storage Time ( 0: Not Recording )	Estimated Storage Utilization* ( Percentage )
SMTP	09/01/19 - 09/02/17	134.84 MB	30 Days	4.05 GB ( 5.46% )
POP3 / IMAP	09/01/19 - 09/02/17	20.35 MB	30 Days	610.56 MB ( 0.82% )
HTTP	09/01/19 - 09/02/17	1.68 GB	30 Days	50.51 GB ( 68.17% )
IM	09/01/19 - 09/02/17	223.69 KB	30 Days	6.71 MB ( 0.01% )
Web SMTP	09/01/19 - 09/02/17	8.87 KB	30 Days	266.10 KB ( 0.00% )
Web POP3	09/01/19 - 09/02/17	420.92 KB	30 Days	12.63 MB ( 0.02% )
FTP	09/02/02 - 09/02/17	257.30 MB	20 Days	5.15 GB ( 6.95% )
TELNET	09/02/02 - 09/02/17	440.70 KB	19 Days	8.37 MB ( 0.01% )
Total				60.34 GB ( 81.44% )
Estimated Storage Utilization = Avg. Traffic * Storage Time <a href="#">Help</a>				

Figure 1 The “Avg. Traffic / Day” , “Storage Time” and “Estimated Storage Utilization”

Once data from a service has reached its designated storage time, the device will automatically delete it. If the service has not reached its set expiry date but the device has reached its storage capacity, then data will be deleted in chronological order starting from the oldest records. This frees up space and allows the device to continue recording new data without any interruption.

For IT administrators to obtain a clear insight into the status and utilization of the device's hard disk, the “Disk Space Usage Status” provides a breakdown of the used space. Graphs visually show the proportion of disk space used for each of the eight services. From within each recorded service, the top 10 users of each service are also shown.

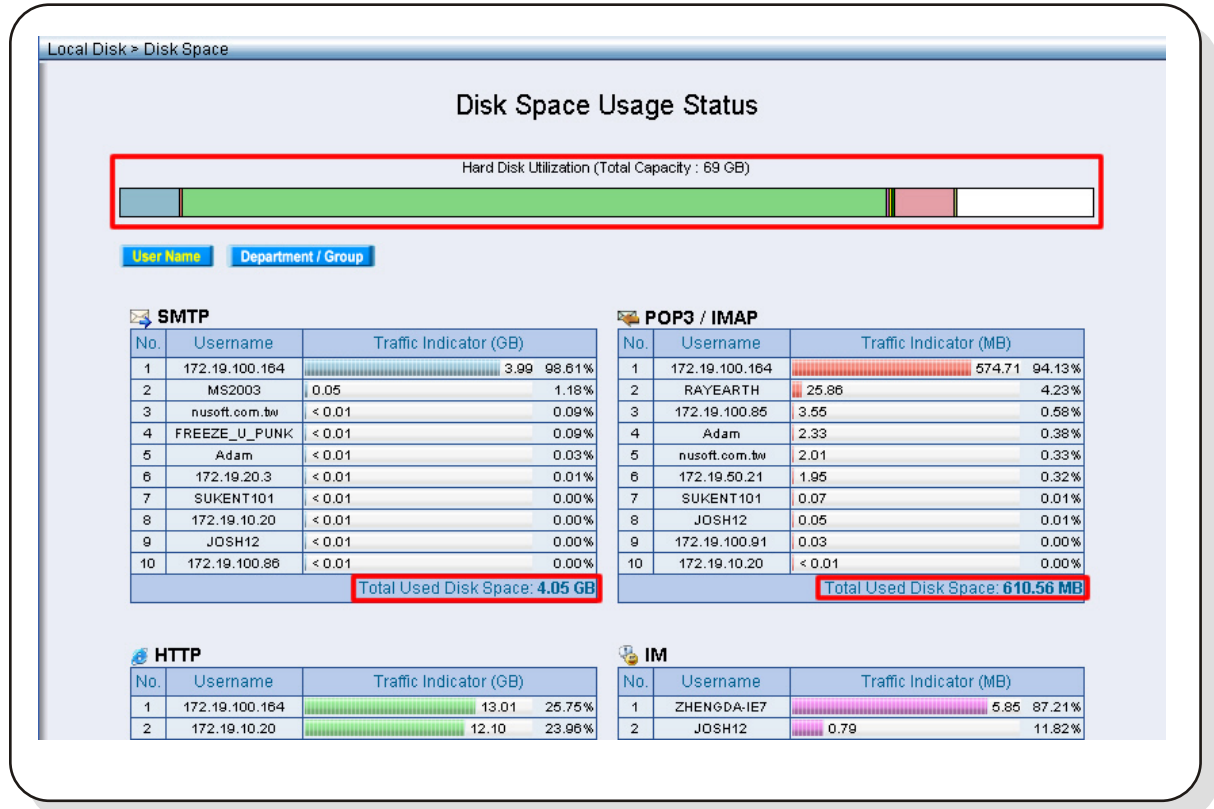


Figure 2 Disk Space Utilization for Each Service and User

# Product News : Detailed Traffic Flow Statistics Aid Network Management

The Internet has integrated itself into the normal daily operation of businesses and has become an essential tool to utilize in order to remain competitive. Its widespread use has also resulted in it being misused in various ways by employees, causing productivity losses. However, the majority of monitoring devices and software are unable to identify the culprits misusing the business's network effectively.

The Nusoft Internet Recorder's Flow Analysis provides the ideal solution for businesses. Traffic analysis charts, are based on traffic flow for individual users and the use of specific services such as FTP, HTTP, instant messaging, etc. A range of charts present this information visually so that IT administrators can gain a clear insight into the networks use for the designated time period and determine the service engaged in and the associated username. This information is shown on the device's "Today Top-10" and "History Top-N".

## Today Top-10

The device's "Today Top-10" displays the top 10 users, services and departments/groups that have occupied the most bandwidth for that day. A unique feature of the Nusoft Internet Recorder is its adjustable time slider, providing the IT administrator with greater flexibility to examine specific time durations.

10-minute time intervals, allows the IT administrator to adjust and examine time durations in a finer level of detail. This level of accuracy can help to pinpoint specific periods of time where a particular user or service consumed a large amount of bandwidth, and would have otherwise not have been so obvious to see.

In just four steps, Today Top-10 can accurately determine details and reasons behind periods of high bandwidth consumption.

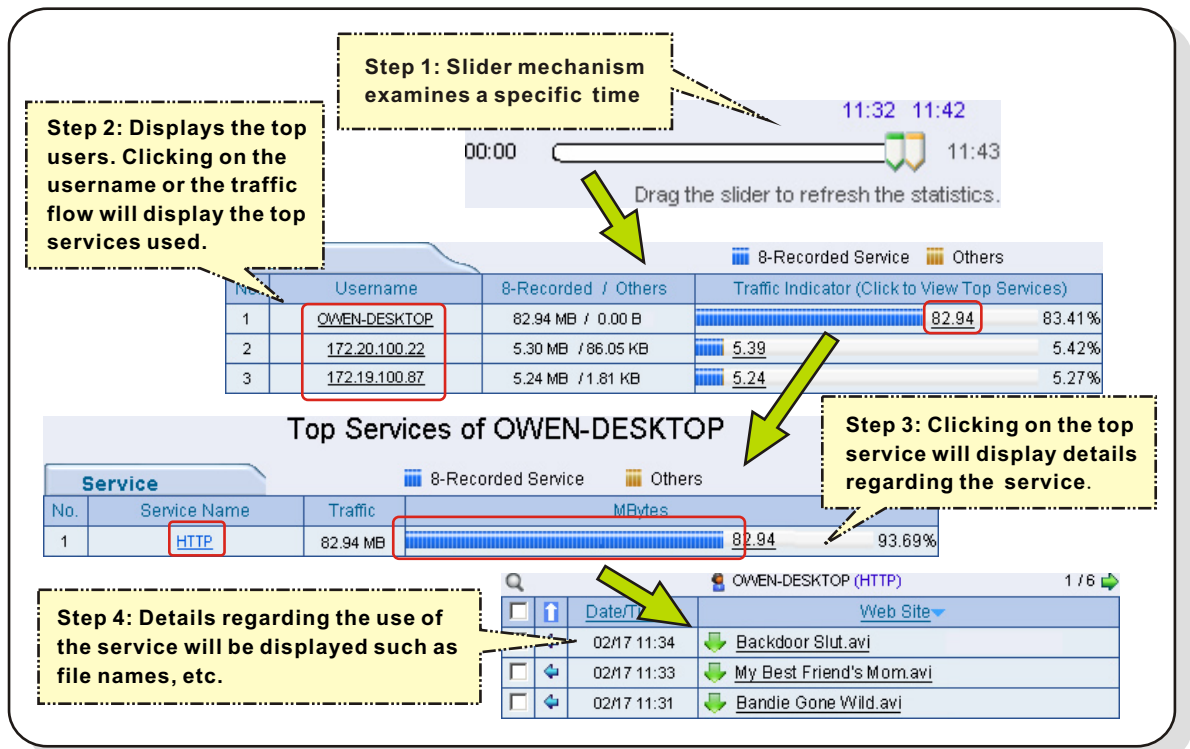


Figure 3 Using Today Top-10 to Discover Inappropriate Online Activities



## History Top-N

"History Top-N" is essentially similar to Today Top-10, providing the bandwidth usage details of users, services. The main difference is that this feature can search through the records of any time from the devices history, and not just from the current day.

Traffic Flow Display	Nusoft Internet Recorder	Third-Party Internet Recording Devices
Today Top-10	Displays the top 10 users, services and groups/ departments from specified time durations in the current day.	Displays only a fixed duration of time and limited service details, making it difficult to find users who might be misusing the company's network.
History Top-N	Displays traffic flow statistics from any period in the past	

Table 1 Comparison between Nusoft Internet Recorder and 3rd Party Recording Device