



QnoSniff Professional 2.0

English User's Manual

Contents

I. Introduction	4
II. QnoSniff Professional Installation and Configuration	6
2.1 Pre-installation preparations	6
2.2 Required components during QnoSniff Professional installation	6
2.3 Example topology for system distribution	7
2.4 Begin installation	7
III. Using QnoSniff Professional	25
3.1 Router settings before using QnoSniff	25
3.2 Launching QnoSniff Professional	28
IV. Basic Setup	37
V. System and Authorization Management	44
5.1 Privilege Configuration	44
5.2 User Management	47
5.3 User log	49
VI. User Group Configuration	50
6.1 Department Setup	50
6.2 User List	52
VII. System Resource and Analysis	56
7.1 CPU usage	56
7.2 Memory usage	62
7.3 WAN Traffic	63
VIII. Summary	65
8.1 Real-time Status	66
8.2 Web information	68
8.3 E-mail information	71
8.4 FTP information	75
8.5 P2P information	78
8.6 Telnet information	80
8.7 IM information	83
IX. Statistics	86
9.1 Statistic report	86
9.2 Department ranking	89
9.3 User ranking	90



X. Logout.....91
XI. Uninstall QnoSniff Professional93

Product Manual Using Permit Agreement

[Product Manual (hereafter the "Manual") Using Permit Agreement] hereafter the "Agreement" is the using permit of the Manual, and the relevant rights and obligations between the users and Qno Technology Inc (hereafter "Qno"), and is the exclusion to remit or limit the liability of Qno. The users who obtain the file of this manual directly or indirectly, and users who use the relevant services, must obey this Agreement.

Important Notice: Qno would like to remind the users read the clauses of the "Agreement" before downloading and reading this Manual. Unless you accept the clauses of this "Agreement", please return this Manual and relevant services. The downloading or reading of this Manual is regarded as accepting this "Agreement" and the restriction of clauses in this "Agreement".

【1】 Statement of Intellectual Property

Any text and corresponding combination, diagram, interface design, printing materials or electronic file are protected by copyright of our country, clauses of international copyright and other regulations of intellectual property. When the user copies the "Manual", this statement of intellectual property must also be copied and indicated. Otherwise, Qno regards it as tort and relevant duty will be prosecuted as well.

【2】 Scope of Authority of "Manual"

The user may install, use, display and read this "Manual on the complete set of computer.

【3】 User Notice

If users obey the law and this Agreement, they may use this "Manual" in accordance with "Agreement". If the users violate the "Agreement", Qno will terminate the using authority and destroy the copy of this "Manual". The "hardcopy or softcopy" of this Manual is restricted using for information, non-commercial and personal purpose. Besides, it is not allowed to copy or announce on any network computer. Furthermore, it is not allowed to disseminate on any media. It is not allowed to modify any part of the "file". Using for other purposes is prohibited by law and it may cause serious civil and criminal punishment. The transgressor will receive the accusation possibly.

【4】 Legal Liability and Exclusion

【4-1】 Qno will check the mistake of the texts and diagrams with all strength. However, Qno, distributors and resellers do not bear any liability for direct or indirect economic loss, data loss or other corresponding commercial loss to the user or relevant personnel due to the possible omission.

【4-2】 In order to protect the autonomy of the business development and adjustment of Qno, Qno reserves

the right to adjust or terminate the software / Manual any time without informing the users. There will be no further notice regarding the product upgrade or change of technical specification. If it is necessary, the change or termination will be announced in the relevant block of the Qno website.

【4-3】 All the set parameters are examples and they are for reference only. You may also purpose your opinion or suggestion. We will take it as reference and they may be amended in the next version.

【4-4】 This Manual explains the configuration of all functions for the products of the same series. The actual functions of the product may vary with the model. Therefore, some functions may not be found on the product you purchased.

【4-5】 Qno reserves the right to change the file content of this Manual and the Manual content may not be updated instantly. To know more about the updated information of the product, please visit Qno official website.

【4-6】 Qno (and / or) distributors hereby declares that no liability will be born for any guarantee and condition of the corresponding information. The guarantee and condition include tacit guarantee and condition about marketability, suitability for special purposes, ownership and non-infringement. The name of the companies and products mentioned may be the trademark of the owners. Qno (and/or) the distributors do not provide the product or software of any third party company. Under any circumstance, Qno and / or distributors bear no liability for special, indirect, derivative loss or any type of loss in the lawsuit caused by usage or information on the file, no matter the lawsuit is related to agreement, omission or other tort.

【5】 Other Clauses

【5-1】 The potency of this Agreement is over any other verbal or written record. The invalidation of part or whole of any clause does not affect the potency of other clauses.

【5-2】 The power of interpretation, potency and dispute are applicable for the law of Taiwan. If there is any dissension or dispute between the users and Qno, it should be attempted to solve by consultation first. If it is not solved by consultation, user agrees that the dissension or dispute is brought to trial in the jurisdiction of the court in the location of Qno. In Mainland China, the "China International Economic and Trade Arbitration Commission" is the arbitration organization.

I. Introduction



QnoSniff Professional 2.0 is a network monitoring PC software that can be integrated with QNO routers for network data logging, filtering, and analyzing. Key information of concern to network administrators can be presented in a format that is both easy to access and read. It can also output statistical charts and reports for reference to the corporate or network administrators.

Subjects of interest to the corporate or network administrators: What are employees doing online?

Most of their time online is spent sending/receiving e-mail, browsing web pages, searching for information, MSN/Skype instant messaging (IM) with friends, using Bittorrent and other P2P file sharing applications. Of these, e-mail and IM are the main channels for information leaks and virus infections. P2P applications are also bandwidth killers and breeding grounds for Trojan spyware. Furthermore, employees waste time on instant messaging and are constantly interrupted during work. The amount of wasted productivity at work is difficult to estimate. However, instant messaging can provide savings on communication costs and improve efficiency, which has convinced corporations to open up their networks to IM applications.

Excessive use of chatting software at work results in reduced work efficiency, network bandwidth abuse from downloads, network congestion affecting normal applications, and leaked confidential information. QnoSniff Professional is specifically designed for corporate users with these concerns, and management solution for the corporate network is of utmost priority. By monitoring and logging network data, QnoSniff Professional can assist the administrator in resolving various issues within the corporate network. QnoSniff Professional is capable of compiling all internet browsing history, e-mail records, chat logs, and even downloaded files into a complete analysis report. Administrator can review the organized report easily.

It brings offers an innovative new concept of "Active Management" into the corporate infrastructure, and replaces the traditional ways of managing for the sake of management. Passive management methods use

negative reinforcement to notify the employee after the fact, which can easily trigger a sense of rejection and result in management issues.

QnoSniff Professional provides ranking of traffic flows that can be checked by everyone to review their individual network usage, e.g. chatting and downloading etc. When the employee realizes that they are currently being "ranked," it is easier to cut back through this concept of self-management.

Traffic ranking also applies to other types of services which the network administrator will be able to identify user behaviors within the local network. With better design and planning of the network infrastructure and management system, we will be able to maximize the efficiency of corporate operations.

QnoSniff Professional also supports PDF output and e-mail forwarding features for generating offline files to be sent out for review.

II. QnoSniff Professional Installation and Configuration

This chapter includes pre-installation preparations, the installation process, and QnoSniff basic configurations.

2.1 Pre-installation preparations

*** Minimum hardware specifications for QnoSniff Professional**

1. Intel P4 2.0GHz and faster / AMD CPU in the same class
2. Operating system: Windows platform (excluding Windows 2000 and older)
3. At least 100G free hard drive space
4. At least 2GB System RAM

*** Required setup**

1. QNO router with mirror port support
2. NIC and Ethernet cable on the QnoSniff host PC to connect to the mirror port on the QNO router
3. Mirror port on the router "must" be enabled
4. SNMP on the router "must" be enabled
5. QnoSniff license key option on the router "must" be enabled (for both trial and official versions)

2.2 Required components during QnoSniff Professional installation

QnoSniff installation package includes all necessary components for proper operation of QnoSniff. However, if these components are already installed on your computer, they may need to be uninstalled or reinstalled/upgraded to the latest version.

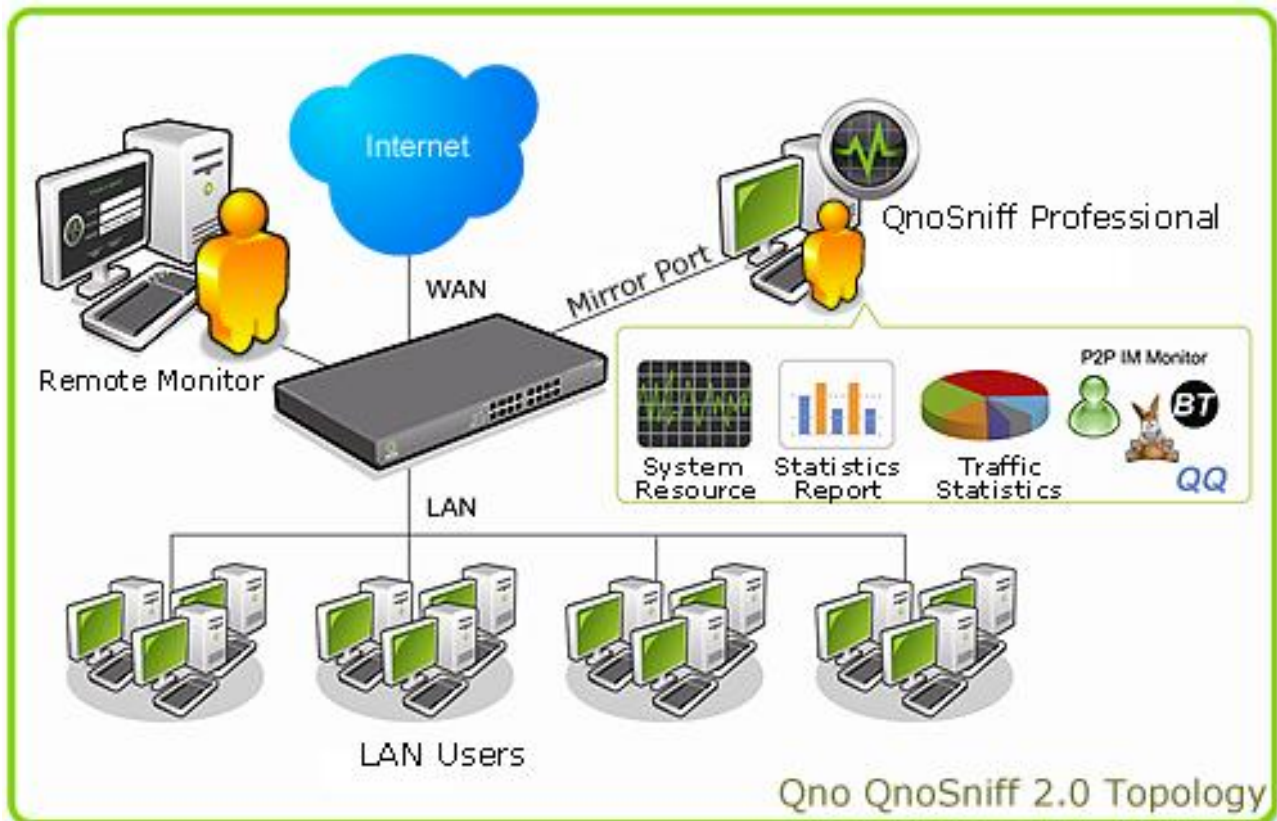
* Apache Server

* WinPcap

* .Net Framework

* PHP


2.3 Example topology for system distribution



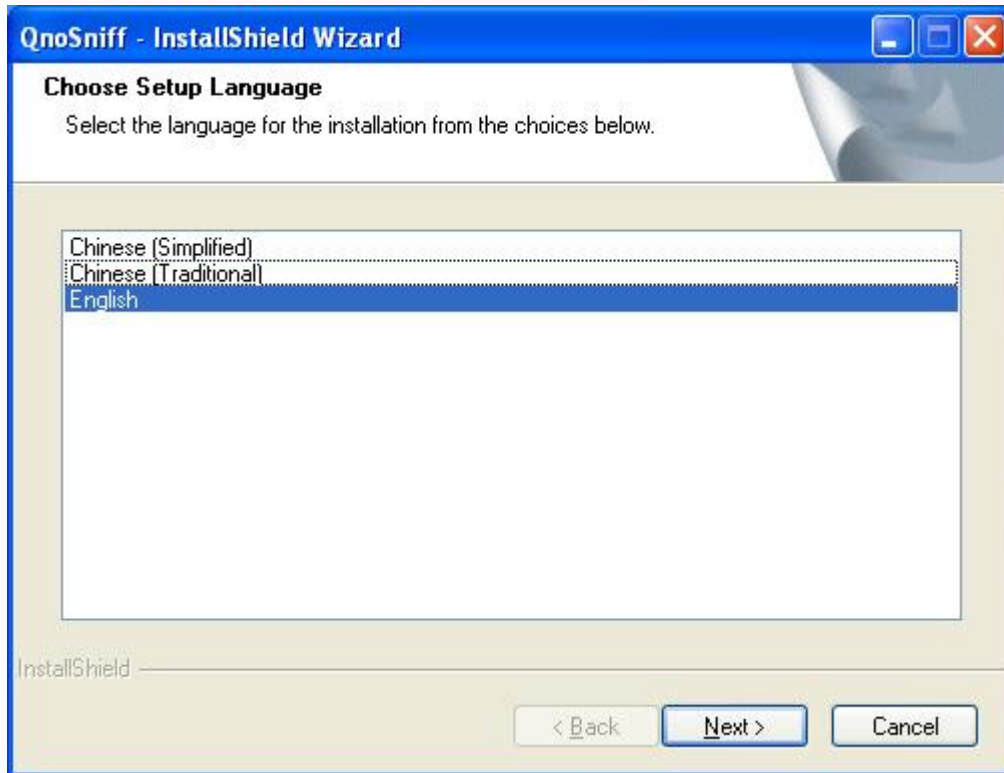
2.4 Begin installation

Please refer to the following steps when installing the software on your PC

1. Insert the QnoSniff Professional CD into the CD drive on your computer.

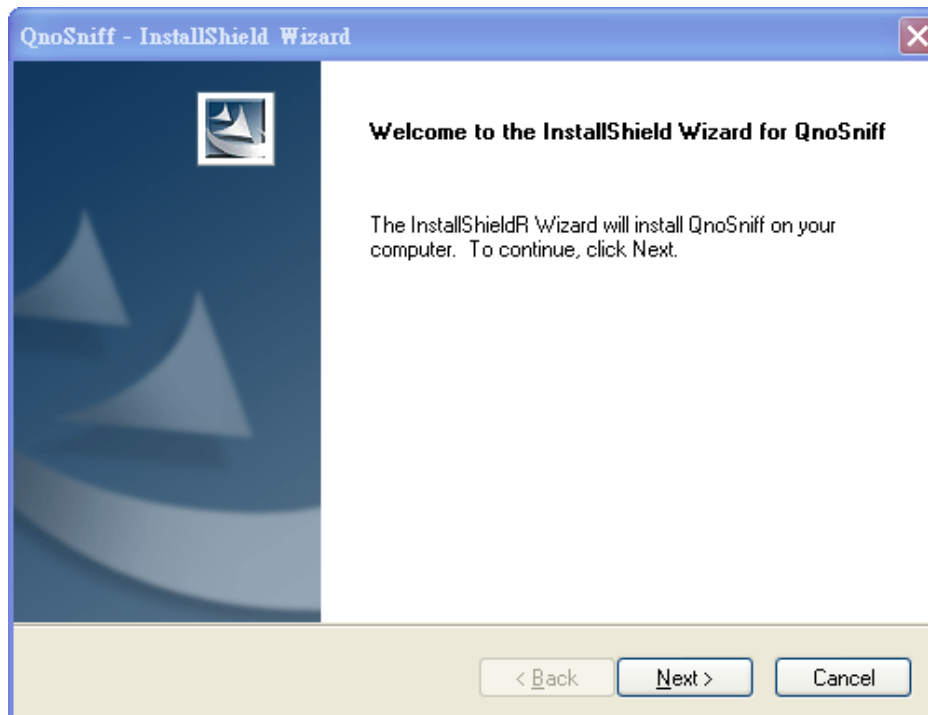
2. Click on Install Files  to begin installation. (Note: The system requires highest administrator privileges for installation)

3. [Language Selection] To begin the installation procedure, first select the language to use at the language selection page.

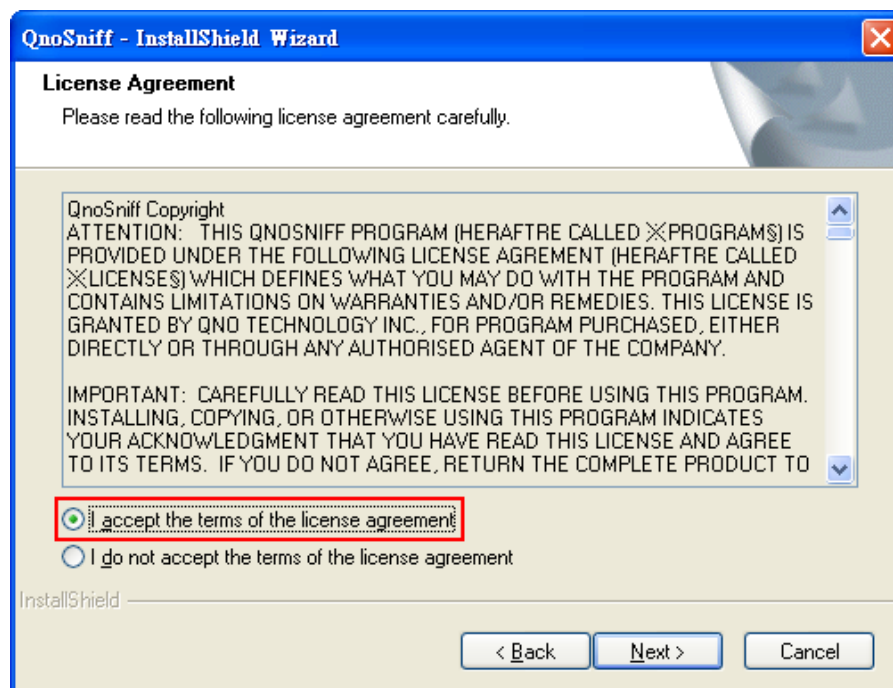


Click "Next" to continue with installation, or click "Cancel" to cancel the installation procedure.

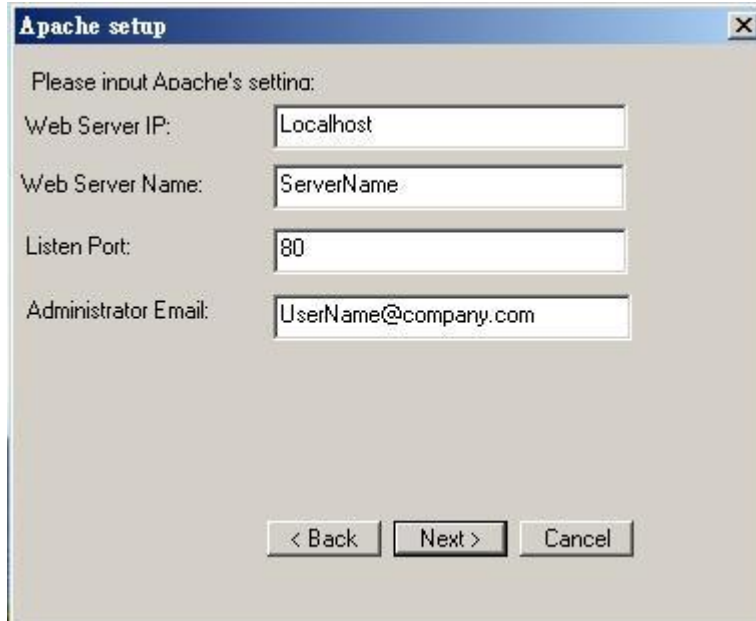
4. [Welcome Page] On the welcome page, click "Next" to continue with installation, or click "Cancel" to cancel the installation procedure.



5. [License Agreement] Please carefully read through the agreement and click "I accept the terms of the license agreement", then click "Next" to continue with installation.



6. [Apache Setup] The Apache Server enables the web service for QnoSniff Professional on the PC for remote monitoring and access by administrators and users. At the installation and setup page for Apache Server, click "Next" to continue with installation.



The screenshot shows a standard Windows-style dialog box titled "Apache setup". The text inside says "Please input Apache's setting:". There are four input fields, each with a label to its left: "Web Server IP:" (value: Localhost), "Web Server Name:" (value: ServerName), "Listen Port:" (value: 80), and "Administrator Email:" (value: UserName@company.com). At the bottom of the dialog, there are three buttons: "< Back", "Next >", and "Cancel".

"Web Server IP" is the IP address of the web server, the default is Localhost (127.0.0.1)

"Web Server Name" is the name of the web server

"Listen Port" is the communication port used by the Apache Server, default is port 80

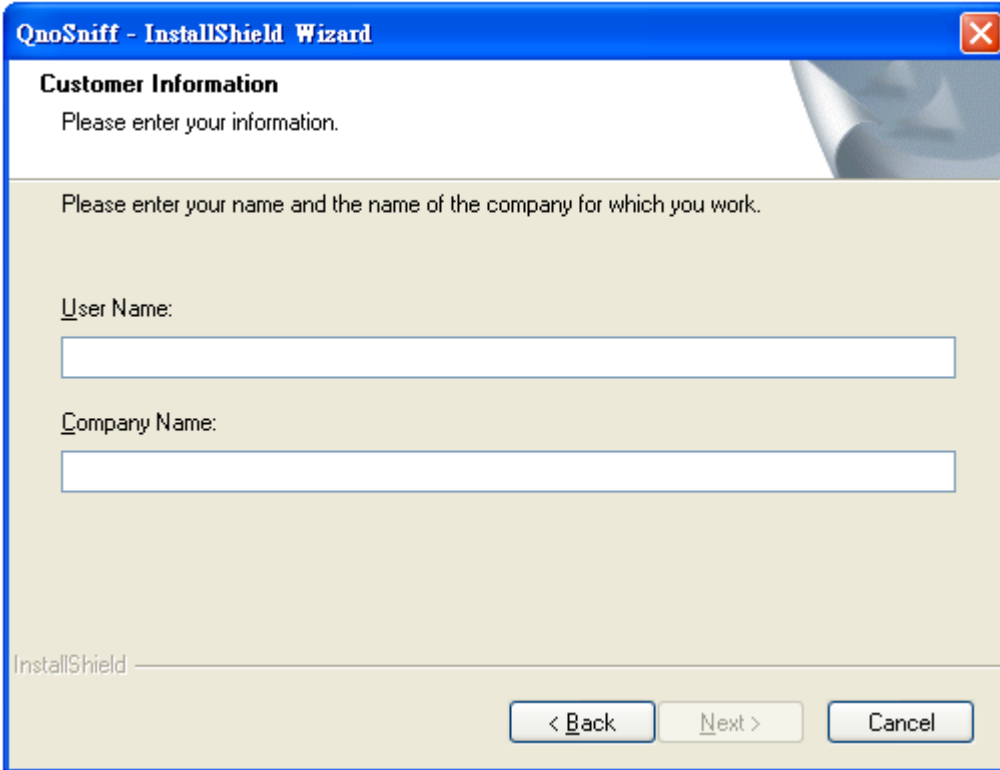
"Administrator Email" is the e-mail with administrator privileges for notification of important user messages

Please click "Next" after setup to continue with installation

* Port 80 is also used by other applications, and therefore is the target of computer virus and worm attacks, which may conflict with the web service. It is recommended to use another port (e.g. 8080).

7. [Customer Information] Please enter your user name and company name on the customer info page. Both

fields must be filled in to be able to click "Next" to continue with installation.



QnoSniff - InstallShield Wizard

Customer Information
Please enter your information.

Please enter your name and the name of the company for which you work.

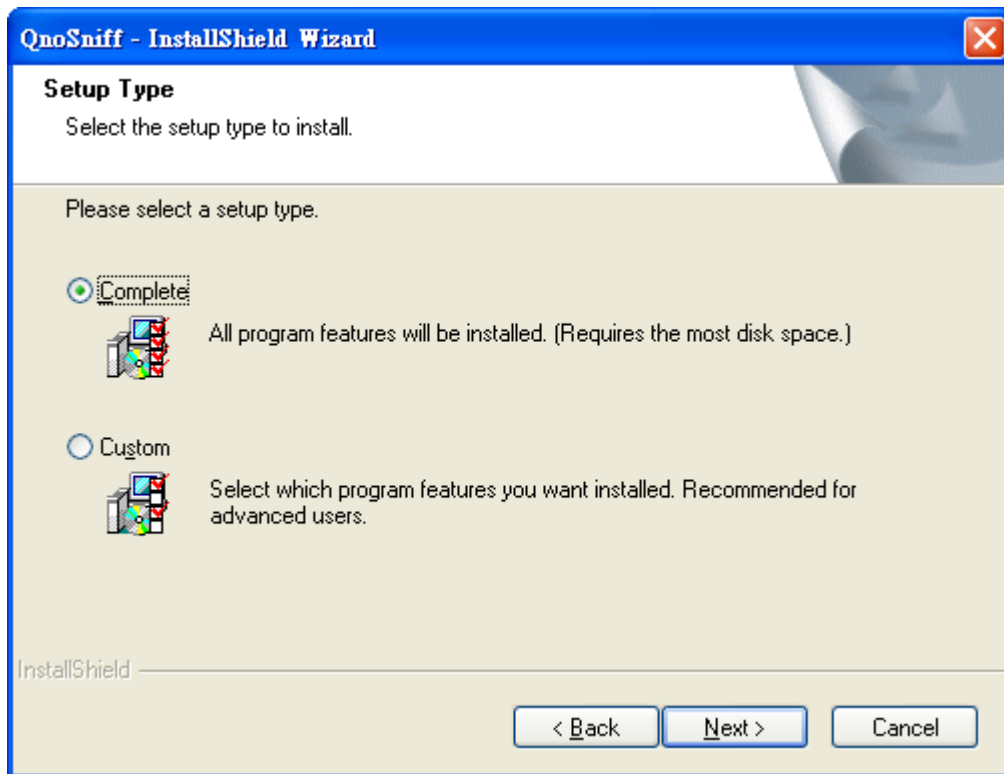
User Name:

Company Name:

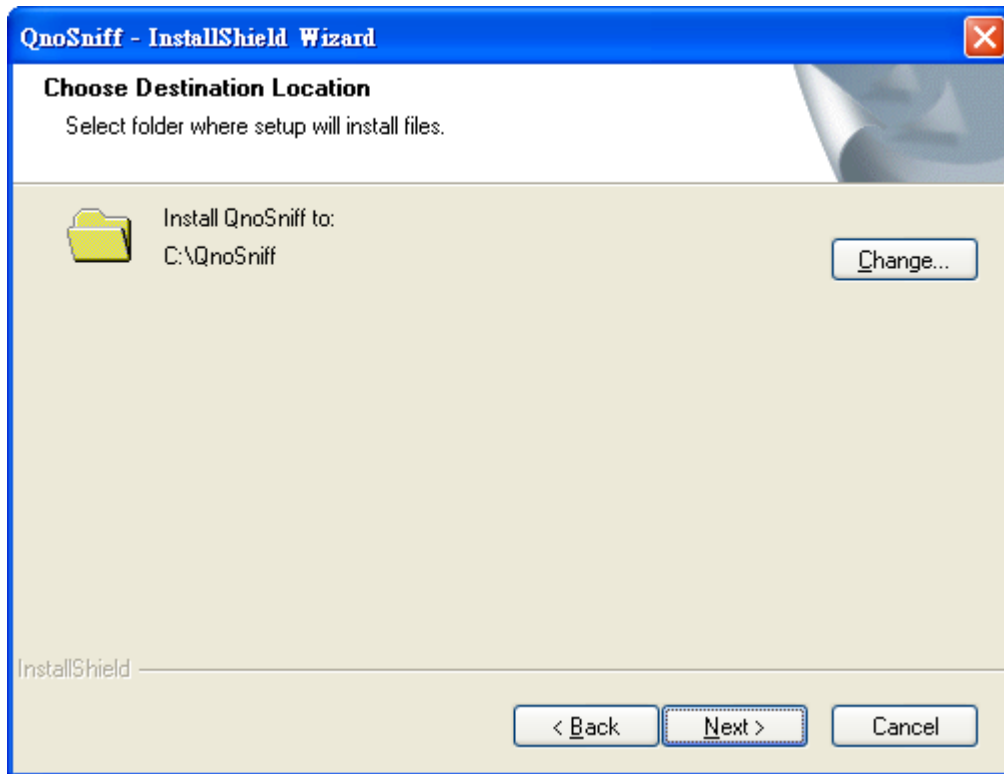
InstallShield

< Back Next > Cancel

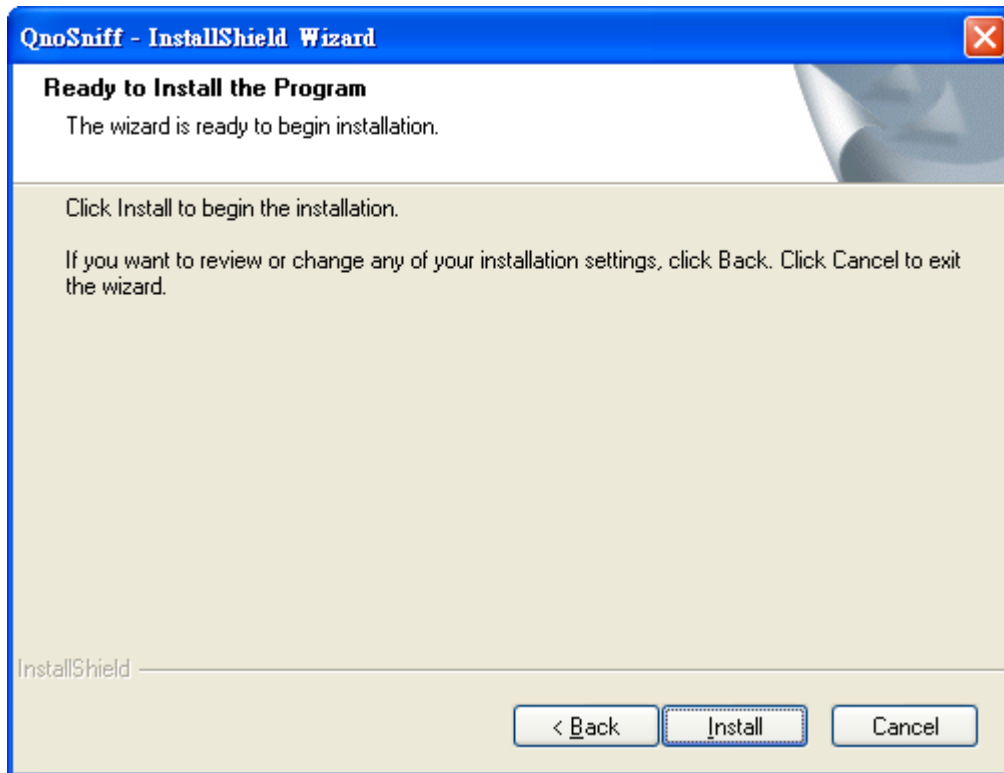
8. [Setup Type] Choose the installation type. Select "All" to install all programs; select "Custom" to choose which programs to install. The screenshot below indicates the "All" installation type. Currently, there is no difference between "All" and "Custom" installation types in QnoSniff Professional 2.0. Select one to continue.



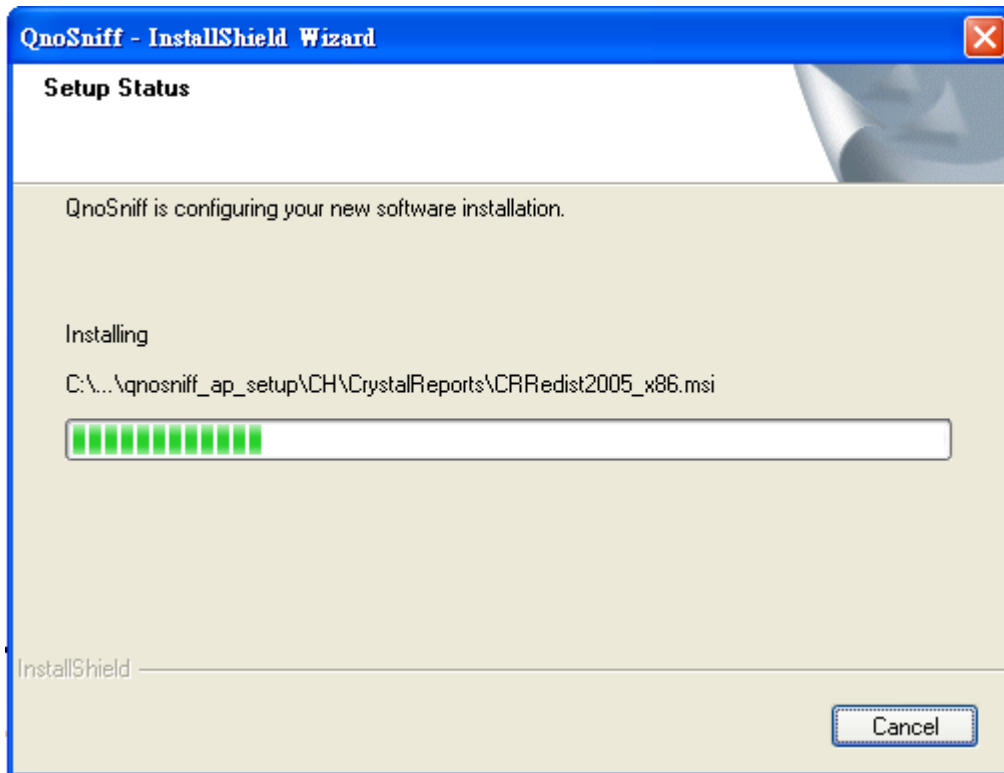
9. [Destination Location] The system default is "C:\QnoSniff" or click "Change" to change the installation directory. Click "Next" to continue to the begin installation page.



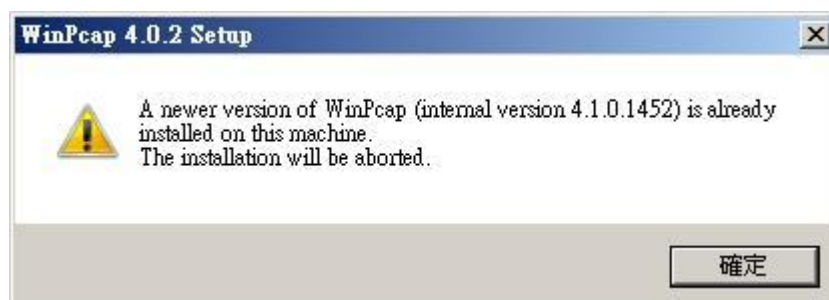
10. [Ready to Installation] Enter the procedure for the main program of QnoSniff Web version. Please click "Install" to begin.



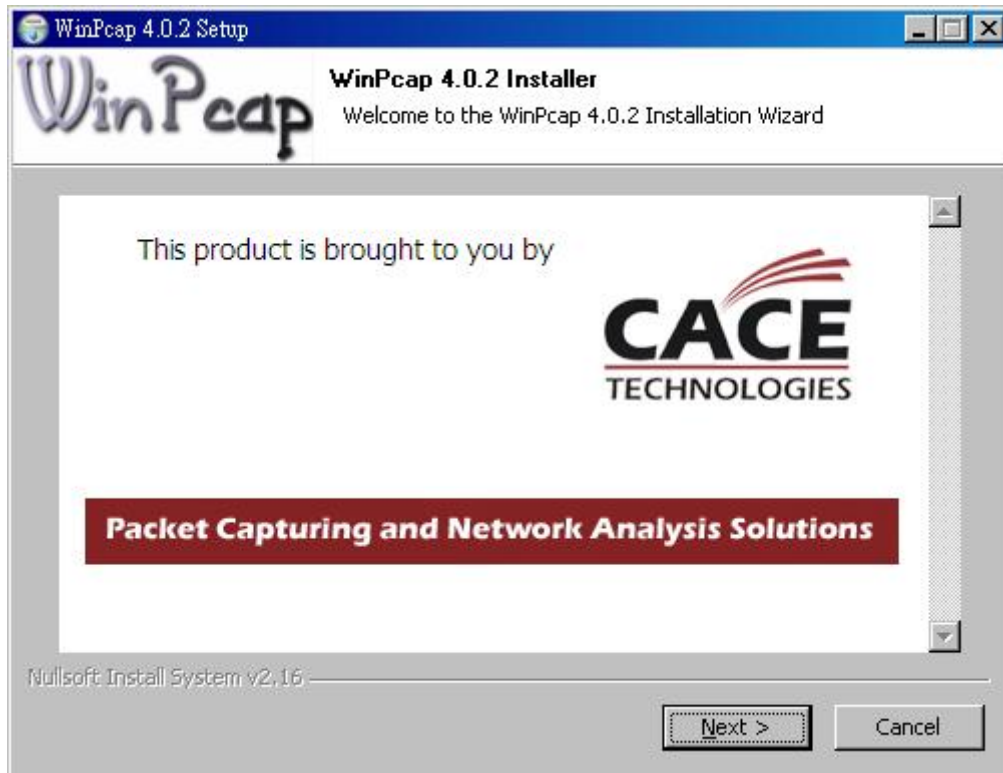
Installing



11. [WinPcap Setup] The WinPcap component will be installed next. If your PC already has WinPcap installed and is newer than the version included with QnoSniff Professional package, the warning message will popup to notify the user that WinPcap installation will be skipped.



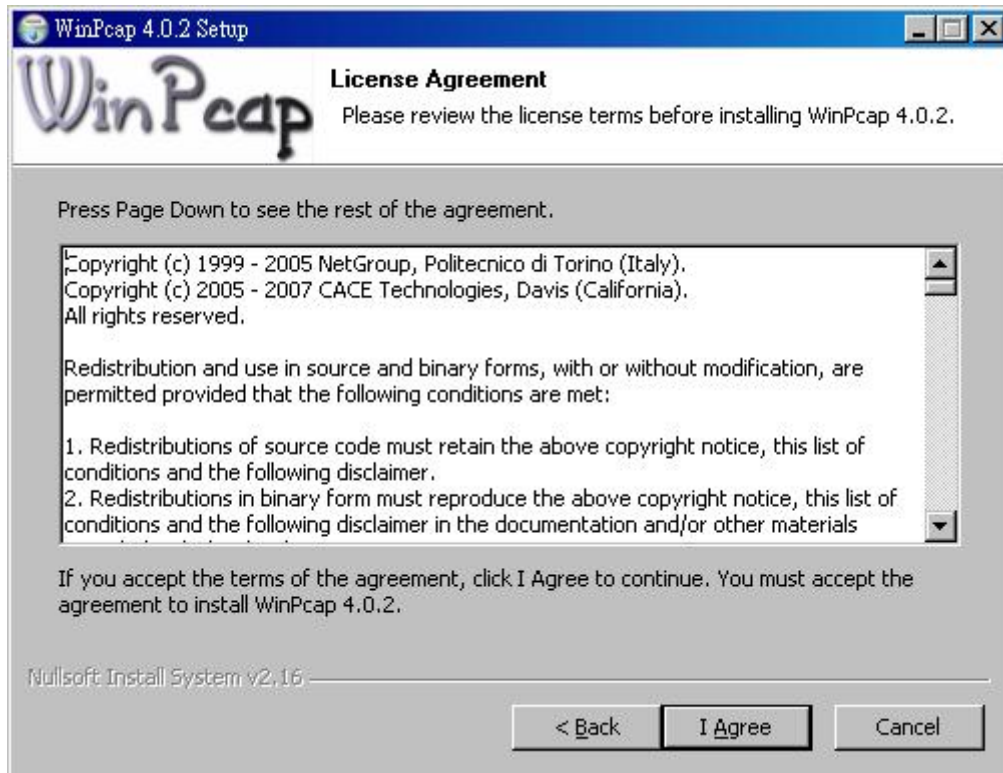
If your PC does not have WinPcap installed, the installation will continue; if you have an older version installed on your PC, the installation will first uninstall the existing WinPcap application before installing the newer version.



Please click "Next" to continue with WinPcap installation.



Please carefully read through the WinPcap license agreement and then click "I Agree" to continue with WinPcap installation.

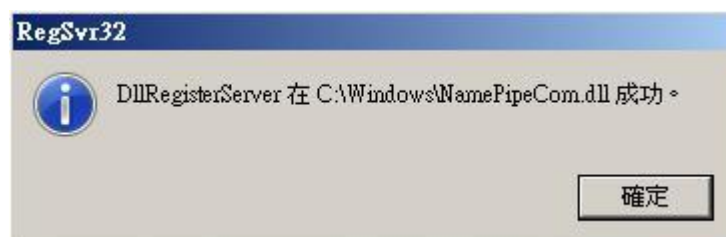


After a few seconds the "Completing WinPcap (installation complete)" screen will be shown.



Click "Finish" to continue installing other components.

12. [Apache Successfully Registered] After WinPcap is installed, the Apache registration process will follow with the successful message.



Please click OK to continue installing other components.

13. [Launch Apache Service] After the component is registered, the Apache service will launch. If a built-in or antivirus firewall is enabled on your PC, you will be asked to grant the service access through the firewall. Please select "Allow" or "Unblock" for the service. If the service is already blocked by the antivirus software or firewall, please add the service to the exception list.

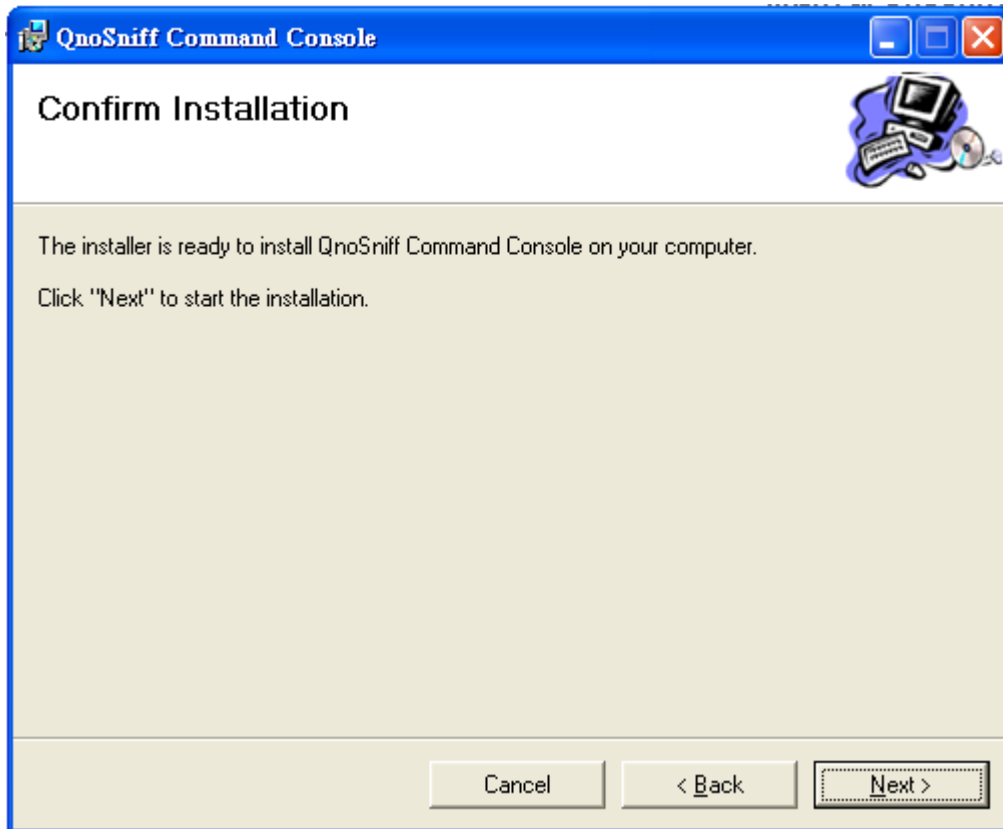


14. [Install .Net Framework 2.0] If your PC already has .Net Framework installed, this step will be skipped; if not, the .Net Framework 2.0 will be installed.

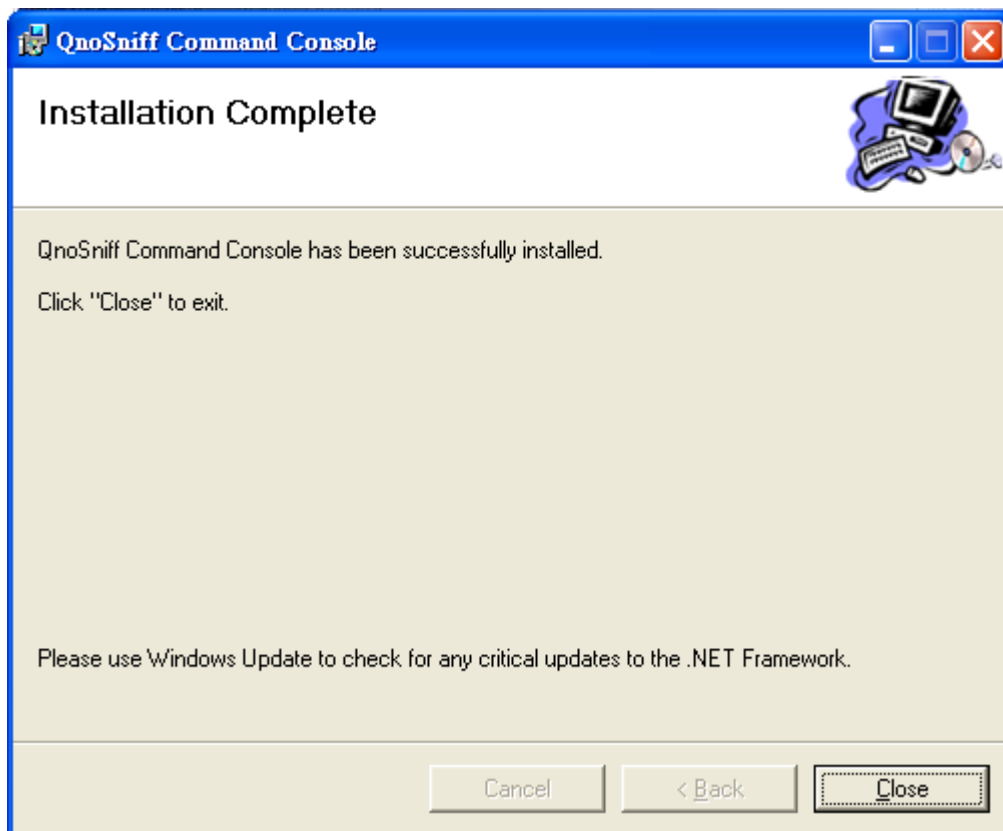
15. [Install QnoSniff Professional- Local] The location installation (main application) of QnoSniff Professional will be installed next.



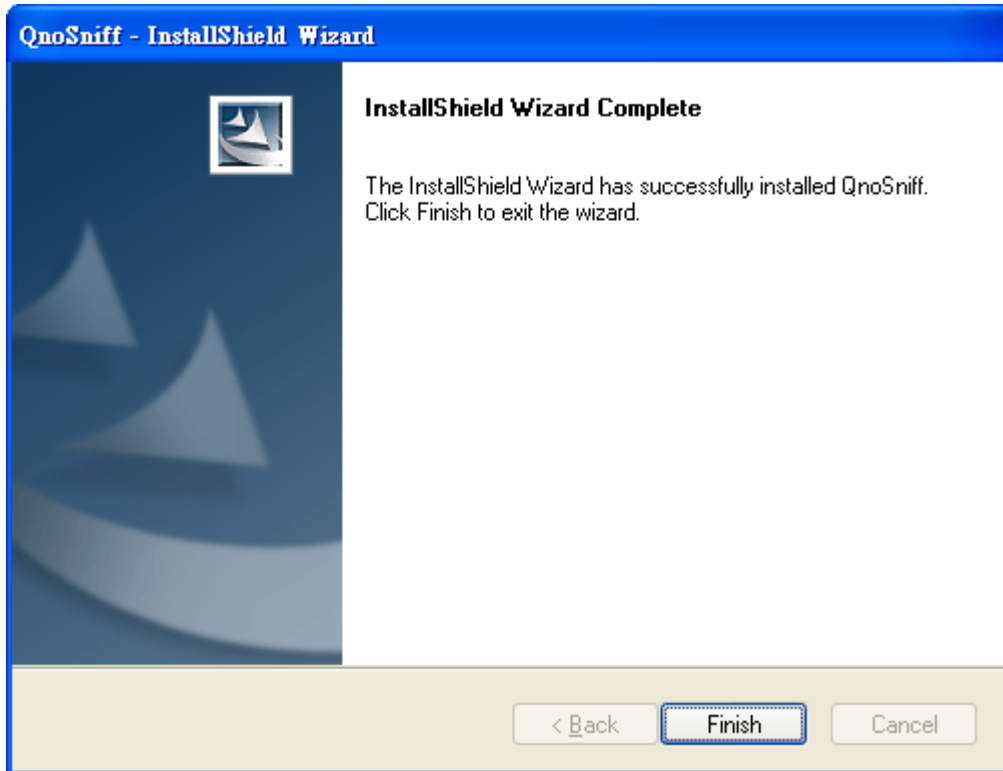
Click "Next" to continue with installation.



Confirm installation of QnoSniff Command Console, and click "Next" to continue.



16. [QnoSniff Local Install Complete] After all components and applications are installed, please click "Close" at the Installation Complete page to exit.



Please click "Finish" to complete QnoSniff Professional installation.

III. Using QnoSniff Professional

This chapter includes steps on how to use QnoSniff Professional and the router settings.

3.1 Router settings before using QnoSniff

Before using QnoSniff Professional, QnoSniff license key option on the router "must" be enabled (for both trial and official versions). Please login to the setup page of the router.

The screenshot shows the QNO router's web management interface. The top navigation bar includes 'English' and 'Logout'. The left sidebar contains menu items: Home, NetWork, QoS, IP/DHCP, Firewall, Advanced Function, System Tool, Port Management, and Log. The main content area displays two status sections:

WAN Status

Interface	WAN 1	WAN 2	WAN 3	WAN 4
IP Address	0.0.0.0	0.0.0.0	0.0.0.0	0.0.0.0
Default Gateway	0.0.0.0	0.0.0.0	0.0.0.0	0.0.0.0
DNS Server	0.0.0.0	0.0.0.0	0.0.0.0	0.0.0.0
Session	0	0	0	0
Downstream Bandwidth Usage(%)	0	0	0	0
Upstream Bandwidth Usage(%)	0	0	0	0
DDNS	Dyndns Disabled 3322 Disabled Dtdns Disabled Qnodns Disabled	Dyndns Disabled 3322 Disabled Dtdns Disabled Qnodns Disabled	Dyndns Disabled 3322 Disabled Dtdns Disabled Qnodns Disabled	Dyndns Disabled 3322 Disabled Dtdns Disabled Qnodns Disabled
Quality of Service	0 rules set	0 rules set	0 rules set	0 rules set
Manual Connect	Release Renew	Release Renew	Release Renew	Release Renew

Physical Port Status

Port ID	1	2	3	4	LAN 2	LAN 1
Interface	WAN 1	WAN 2	WAN 3	WAN 4	LAN	
Status	Enabled	Enabled	Enabled	Enabled	Connect	Enabled

Go to "System Tool" => "License Key"

System Tool	
	Password
	Diagnostic
	Firmware Upgrade
	Setting Backup
	SNMP
	Time
	System Recover
▶	License Key

▶ **License Key**

Current Time : 2009-09-29 NTP Server

License Key Number : - - - -

Feature Name	Trial version	Official Version	Registration time	Status And Information
QnoSniff	<input type="button" value="Trial"/>			
Inbound Load Balance	<input type="button" value="Trial"/>			

There are two options:

[1] Trial:

Click the "Trial" button to begin the 15-day trial period. After 15 days, QnoSniff Professional will stop functioning and the service will not be available. Please purchase and register the product license key if you would like to continue using QnoSniff Professional. Enter your license key and click "Submit" to resume using QnoSniff Professional (registered).

[2] Purchase and register the license key:

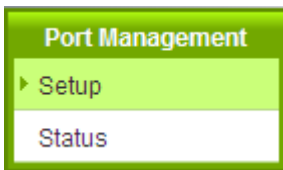
If you do not require the trial period and wish to immediately activate QnoSniff Professional, please purchase and register the product license key. Enter your correct license key and click "Submit" to immediately register and activate QnoSniff Professional.

*** Please note:**

1. After activating the trial version of QnoSniff Professional, the trial period cannot be stopped and will continue to count down.
2. If your product license key is entered incorrectly three times, the license key page will be locked down completely and will not accept any further attempts. Please contact your distributor for related QNO services.

Enable mirror port:

Go to port management



Enable mirror port (port1) (make sure the port is not disabled) and then click "OK" to save the changes.

Enable Port 1 as Mirror Port

Port ID	Interface	Disabled	Priority	Speed Status	Duplex Status	Auto Neg.	VLAN
1	WAN1	<input type="checkbox"/>	Normal ▼	100M ▼	Full ▼	<input checked="" type="checkbox"/>	
2	WAN2	<input type="checkbox"/>	Normal ▼	100M ▼	Full ▼	<input checked="" type="checkbox"/>	
3	WAN3	<input type="checkbox"/>	Normal ▼	100M ▼	Full ▼	<input checked="" type="checkbox"/>	
4	WAN4	<input type="checkbox"/>	Normal ▼	100M ▼	Full ▼	<input checked="" type="checkbox"/>	
LAN2	LAN	<input type="checkbox"/>	Normal ▼	100M ▼	Full ▼	<input checked="" type="checkbox"/>	VLAN1 ▼
LAN1	LAN	<input type="checkbox"/>	Normal ▼	100M ▼	Full ▼	<input checked="" type="checkbox"/>	VLAN1 ▼

Apply Cancel

Check that the Ethernet cable is plugged into the mirror port on the router, and connected to the NIC of PC with QnoSniff Professional installed.

3.2 Launching QnoSniff Professional

After the router is configured to support the QnoSniff Professional, please logon to the PC with QnoSniff

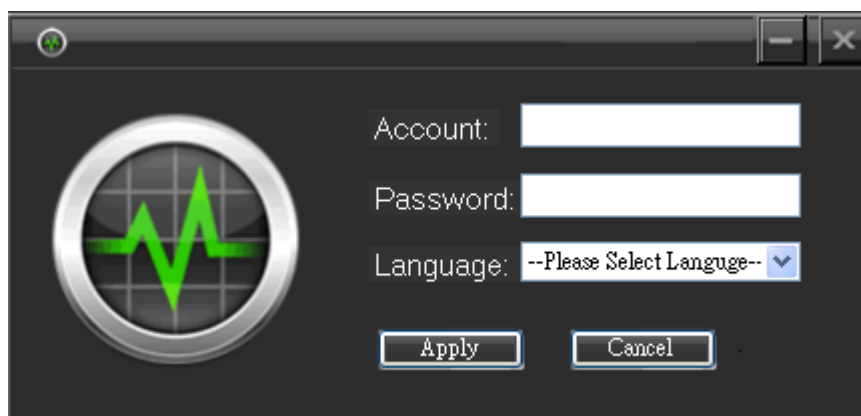


Professional installed. Click on the desktop icon to launch QnoSniff Professional



If your firewall or antivirus is enabled, please add the QnoSniff application to the exception list (unblock) before activating QnoSniff Professional. This will ensure proper connection and operation for QnoSniff Professional.

The login screen below will be shown.



Default account is administrator (lower case)

Default password is admin (lower case)

Language selection:

Traditional Chinese

Simplified Chinese

English

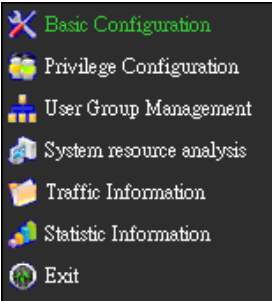
Click OK after selecting the language to go to the QnoSniff Professional AP control panel.



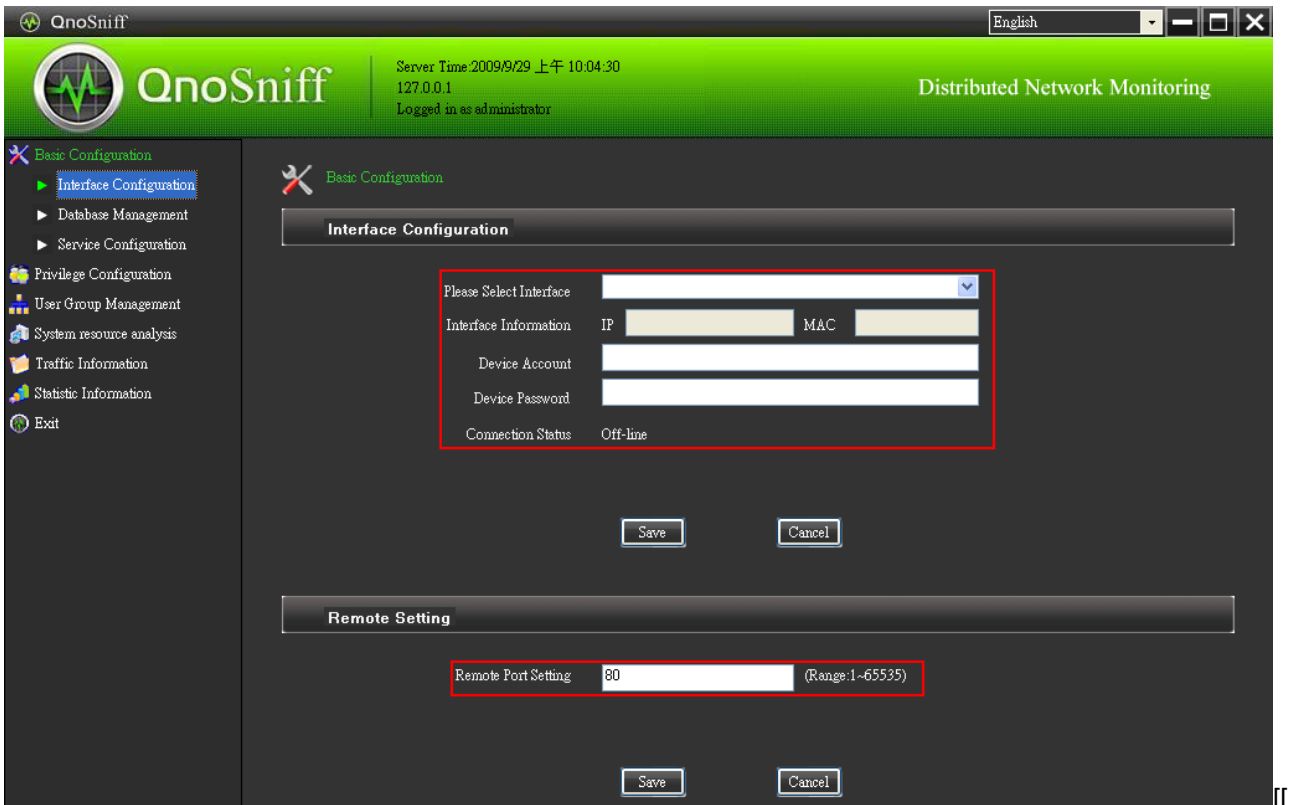
The system time, login IP, and login ID are shown at the top left corner; the language selection menu is at the top right corner.



The main menu to the left side includes 7 items



To properly use QnoSniff functions, the basic configuration must be first setup.



1] Monitoring target: The NIC for packet/traffic monitoring. QnoSniff Professional will capture the network information from your PC; you may also select it from the pull-down menu. The NIC to be monitored must be connected with Ethernet cable to the mirror port on the router.

Please Select Interface	<input type="text" value="Network adapter 'Adapter for generic dialup and VPN capture' of"/>
Interface Information	<input type="text" value="Network adapter Intel(R) Wireless WiFi Link 4965AGN (Microso"/> <input type="text" value="Network adapter Realtek RTL8169/8110 Family Gigabit Ethern"/>
Device Account	<input type="text"/>
Device Password	<input type="password"/>
Connection Status	Off-line

[2] After selecting the correct monitoring target, the IP and MAC address will automatically be shown.

[3] Login account/password: Enter the router account/password with which you connected to the PC, and then click "Save" to verify the connection.

[4] If you receive the "Action Failed" message after clicking "Save," check the following:

1. Incorrect router account/password: please enter again.

2. Connection issue between router and PC: confirm connection to mirror port.

3. Router support for QnoSniff Professional is not enabled: please follow the instructions in the previous chapter.

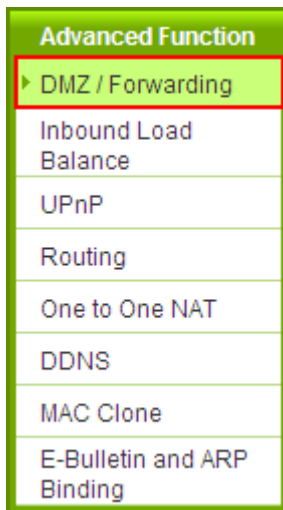
[5] After saving the router account/password, the connection between QnoSniff Professional and the router will be verified. The message will be shown if connection is successful as well as the trial/registered version of QnoSniff Professional (as below).

Please Select Interface	<input type="text" value="Network adapter Realtek RTL8169/8110 Family Gigabit Et"/>	
Interface Information	IP <input type="text" value="192.168.1.200"/>	MAC <input type="text" value="00-1F-C6-7B-8A-B"/>
Device Account	<input type="text" value="admin"/>	
Device Password	<input type="password" value="*****"/>	
Connection Status	Off-line	

[6] Remote access configuration: QnoSniff supports remote web access, and the communication port must be first configured to enable this feature. System default is port 80 or you can change the port to match specific requirements. Click "OK" to save the changes. In addition to the communication port used by the program, the

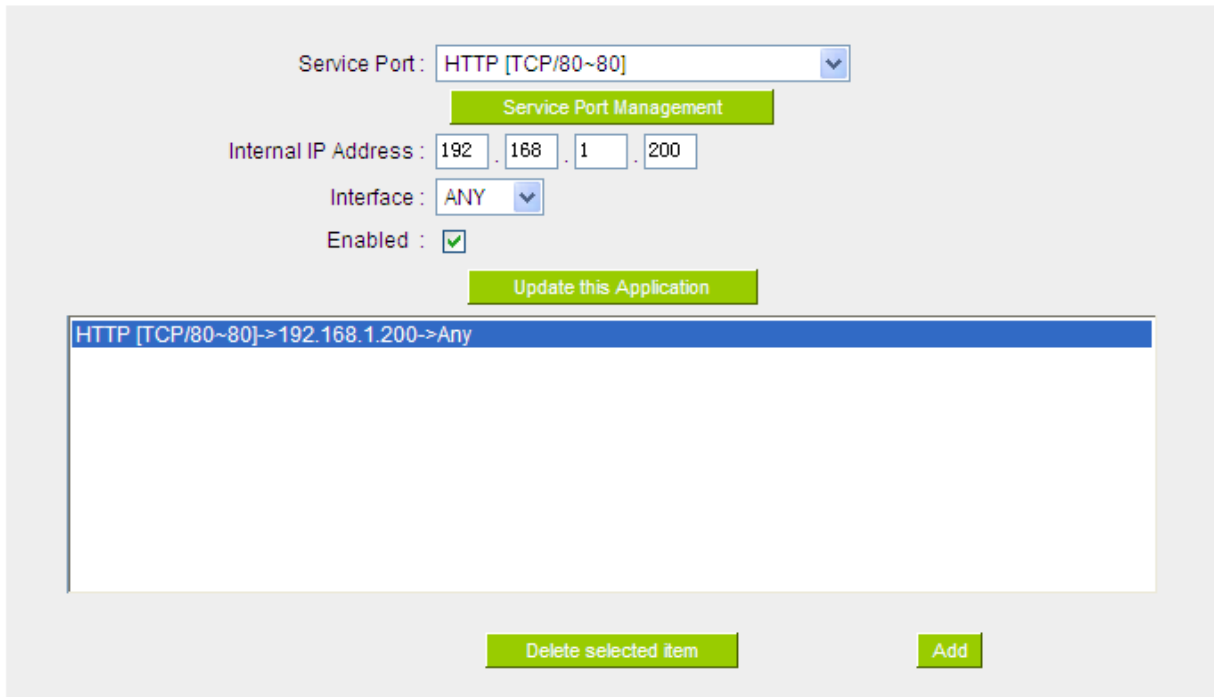
firewall and antivirus software on your PC must also be configured to open up the port for remote access to take effect. The router must also be configured to recognize the remote access port, as shown below:

1. Go to the router setup page, select "Advanced setup" => "DMZ/Forwarding" => "Port Range Forwarding"



2. In the port range forwarding page, assign the communication port you configured for remote access in QnoSniff Professional to the PC with QnoSniff Professional installed. For example, if the IP address of PC with QnoSniff installation is 192.168.1.100 and the remote access port is 80, set the communication port as HTTP [TCP/80 ~ 80], internal IP address as 192.168.1.100, port location to "Any" and add to the enabled list. Click "OK" for the changes to take effect.

Port Range Forwarding



Service Port: HTTP [TCP/80~80]

Service Port Management

Internal IP Address: 192 . 168 . 1 . 200

Interface: ANY

Enabled:

Update this Application

HTTP [TCP/80~80]->192.168.1.200->Any

Delete selected item Add

*** Please note!**

1. If your remote access port is not listed in the pull down menu of existing service ports on the router, it needs to be added to the router "Service Port Management".
2. If you need to assign a specific WAN IP for remote access and not from all WAN connections, choose the WAN IP interface instead of "Any" for the port location.
3. If the remote access port for QnoSniff is already in use by another router (e.g. the remote management port for the router is also port 80), these two ports can not be the same one and should be changed.

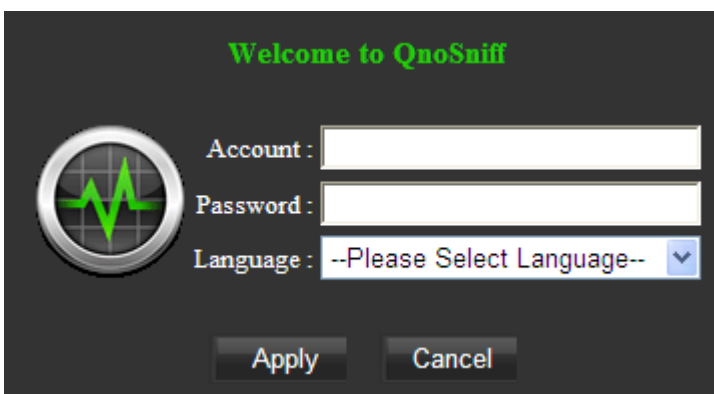
After configuring the remote access port in the program, PC firewall or antivirus software, and router, test the remote access connection by logging into the web interface of QnoSniff Professional from a remote host.

Check the WAN IP address from the router homepage.

Interface	WAN 1
IP Address	192.168.4.116
Default Gateway	192.168.4.1
DNS Server	192.168.5.120 192.168.5.21
Session	3
Downstream Bandwidth Usage(%)	0
Upstream Bandwidth Usage(%)	0
DDNS	Dyndns Disabled 3322 Disabled Dtdns Disabled Qnoddns Disabled
Quality of Service	0 rules set
Manual Connect	<input type="button" value="Release"/> <input type="button" value="Renew"/>

In the example above, enter "http://192.168.4.116:80" in the address bar of the browser (the port number is at the end after the colon)

If the configuration and connection are both correct, the login page will be shown.



Default account is administrator (lower case)

Default password is admin (lower case)

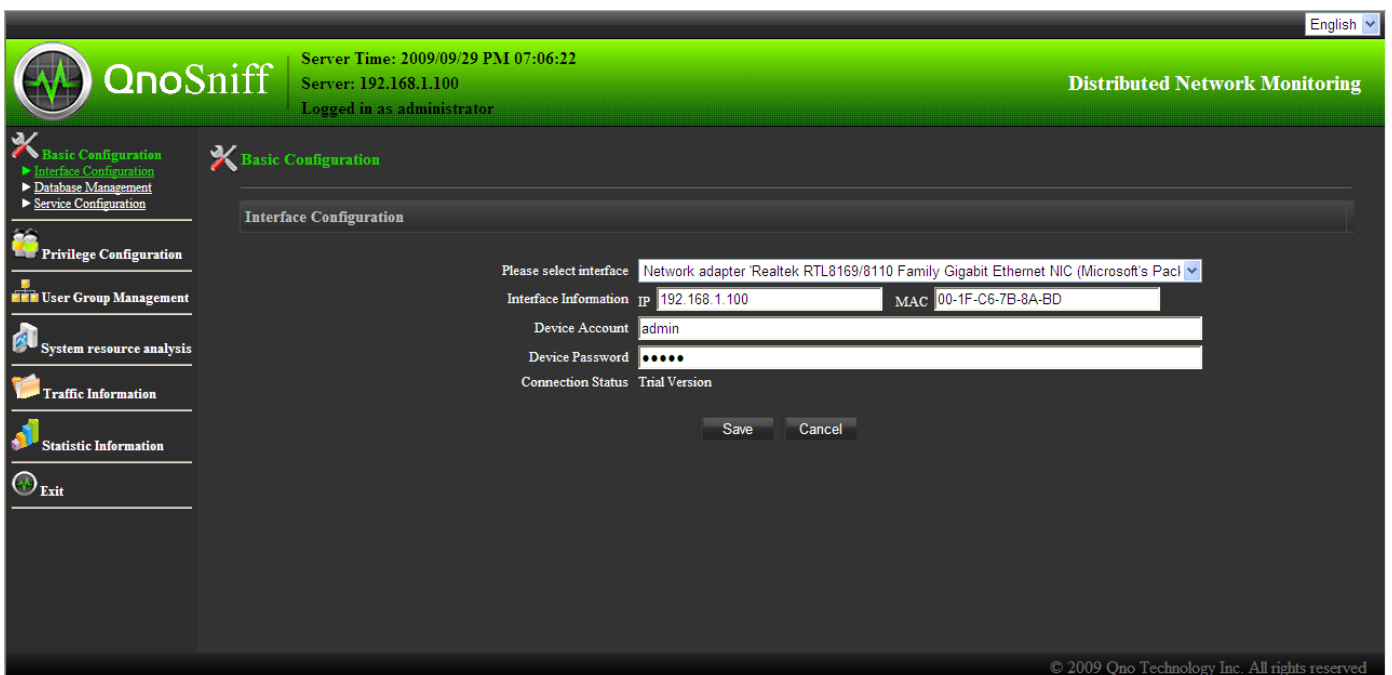
Language selection:

Traditional Chinese

Simplified Chinese

English

Click OK after selecting the language to go to the QnoSniff Professional Web control panel.



*** Please note!**

1. If you enter a specific WAN interface in Qno router port range forwarding page, please use the IP address of the WAN when entering the address link of remote login. If you selected "Any" for the interface, then any WAN IP can be used for the connection.

2. Contents presented by QnoSniff Professional local installation and web (remote access version) are identical; the only difference is in the basic configuration settings:

Local installation version can change the remote access port, and web version cannot.

Local installation version can change the database path on the hard drive, and web version cannot.

Local installation version can directly output a portion of data to PDF file, and web version cannot.



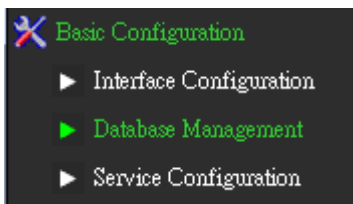
(However, the web version can send out e-mail with data directly converted into PDF file)

IV. Basic Setup

This chapter includes the basic software setup, such as database path directory, storage device, and restrictions etc.

Basic configuration includes three sub-menus:

1. Interface configuration
2. Database management
3. Service configuration



The interface configuration is included in the previous chapter.

Database management

DataBase

Database Storage Path:

Database Reserve for: Month (Select "0" for continuously data collection)

Database Storage Type: Overwrite when exceeding
 Stop receiving and storing when exceeding

Disk Space Alert : when less then MB,alert user /admin(200~2048MB)

Email File Size Limitation: MB (1~10MB,Not record if exceeding)

FTP File Size Limitation: MB (1~10MB,Not record if exceeding)

Open EMAIL ALERT(send to super user)

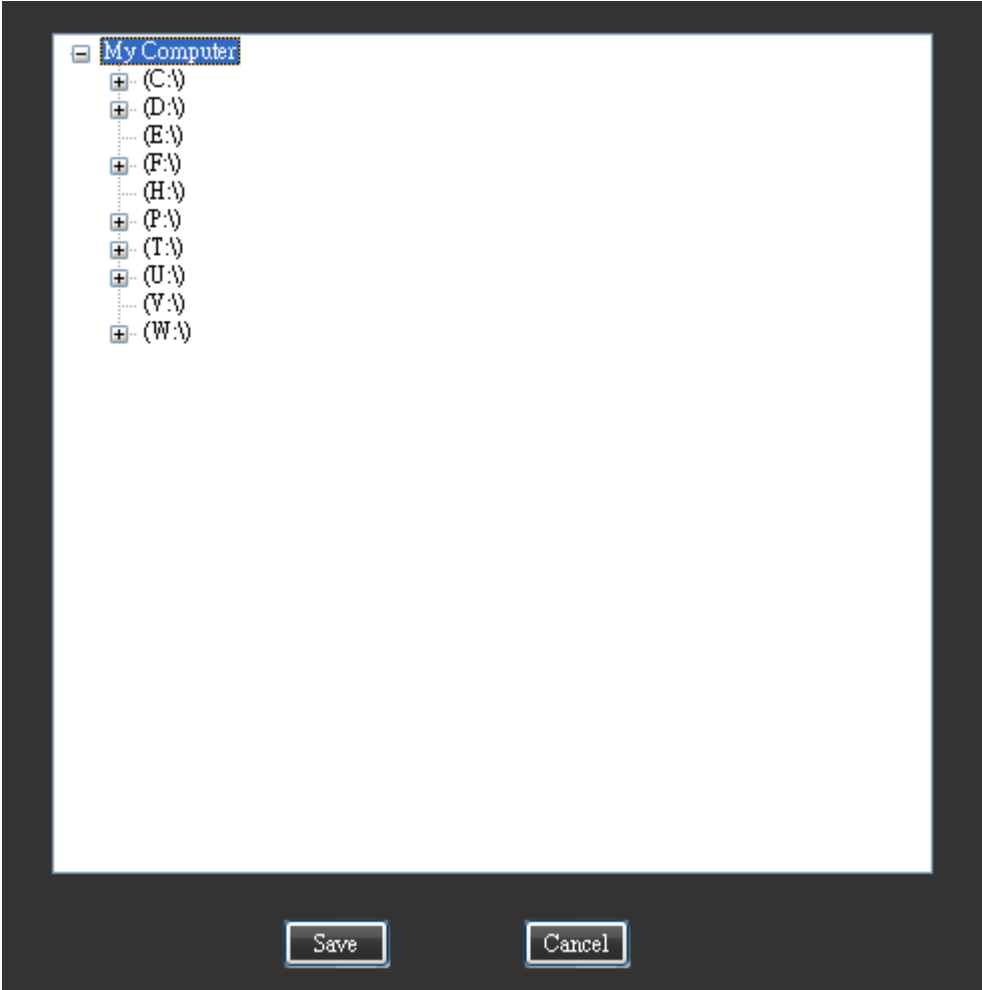
SMTP Server: (maxlength 80 , ex:mail.mydomain.com) Port:

Account: EmailBox:

Password:

Email Subject: (maxlength 50)

Item	Description
Database Storage Path	Default installation path is on the hard drive partition as the QnoSniff Professional program. To change the database path directory, please click on the "Browse" button at the lower right and browse to the desired directory in the popup window.

	 <p>* Database size will increase along with time. Make sure there is sufficient hard drive space to allow the database to grow.</p>
<p>Database reserved for</p>	<p>Database retention period can be set to 1-6 months. Two actions can be configured for database entries past the retention period.</p> <ol style="list-style-type: none"> 1. <input checked="" type="radio"/> Overwrite when exceeding <p>New entry will overwrite the old entry. Old database entries will not be archived, and therefore used hard drive space will not be increased.</p> <ol style="list-style-type: none"> 2. <input checked="" type="radio"/> Stop receiving and storing when exceeding <p>New entries will not be received nor saved, and old database entries will not be deleted. The retention period must be reconfigured or reset in order to start</p>

	<p>collecting and saving new data.</p> <p>3. (Select "0" for continuously data collection)</p> <p>If you do not want the database to be interrupted and do not wish to delete old entries, please choose "0 months" for the retention period to indicate that the database will not be stopped.</p>
<p>Remaining capacity warning</p>	<p>1. Size detection and warning for remaining hard drive space:</p> <p>When the remaining hard drive space for database storage is lower than ____ MB (200-2048MB), notify the administrator.</p> <p>2. E-mail file size limitation: To prevent excessive e-mail data quickly taking up and wasting storage space, the e-mail record size can be restricted to 1-10 MB. If the total e-mail data (including attachments) exceeds the size limitation, the e-mail will still be recorded up to the configured data size. Therefore, attachments may be partially cut away and cannot be properly opened, but the file name will be retained.</p> <p>3. FTP file size limitation: To prevent excessive FTP data quickly taking up and wasting storage space, the FTP file size can be restricted to 1-10 MB. If the FTP file (both uploaded and downloaded) exceeds the size limitation, the FTP transaction will still be saved up to the configured file size. Therefore, attachments may be partially cut away and cannot be properly opened, but the file name will be retained.</p>
<p>Enable E-mail alert</p>	<p>After enabling this function, the system will send out an e-mail to notify the administrator when the remaining storage space is lower than the designated capacity. In addition, the e-mail report function on each page must also be forwarded through this SMTP Server. If the SMTP Server is not correctly configured, the e-mail report function cannot be used.</p> <p>SMTP Server: Please enter the domain of the SMTP Server (e.g. ms12.hinet.net)</p> <p>Port: Communication port for outgoing e-mail (e.g. 25)</p> <p>Account: E-mail account (e.g. tony.chen)</p>



QNO Technology QnoSniff Professional 2.0

	<p>Password : E-mail password</p> <p>EmailBox : E-mail address (e.g. tony.chen@ms12.hinet.net)</p> <p>Email Subject : E-mail subject</p>
--	---

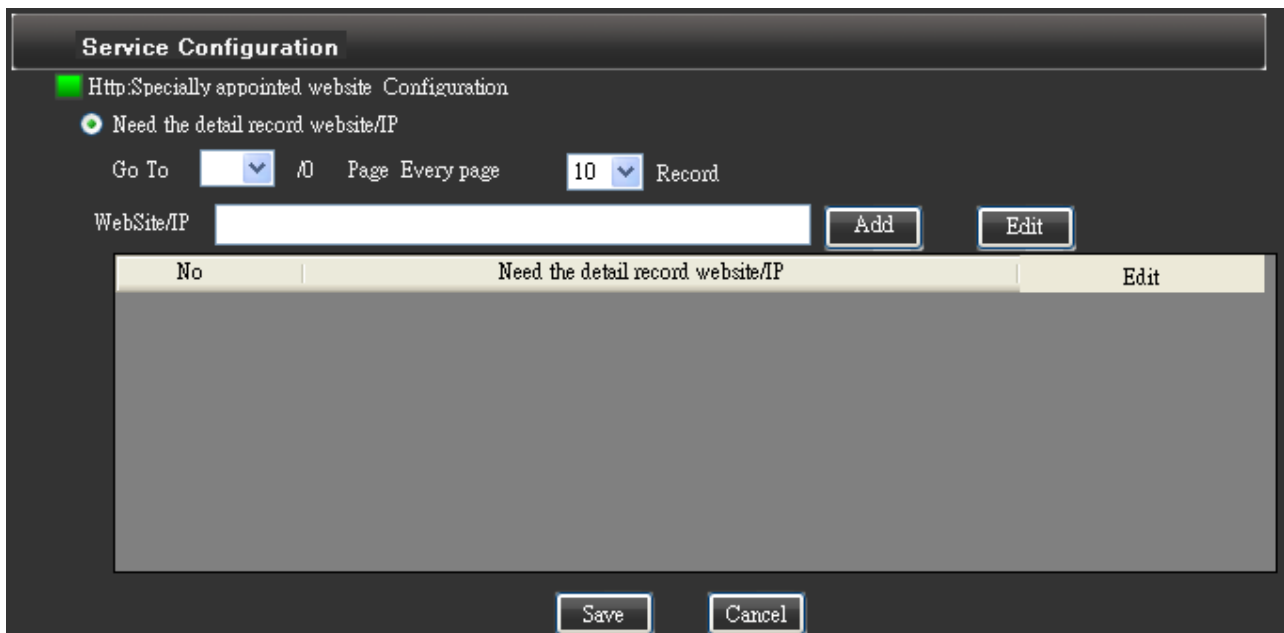
Service Configuration: Configure the account for QQ IM monitoring based on the http (web visits) logging mode.

HTTP specific website configuration requires detailed records of the website and IP address:

QnoSniff Professional by default only logs the main domain address for http/website/web page visits. For example, the domain "http://tw.yahoo.com/" will be logged, but pages under the domain will not be shown and will only be logged as "tw.yahoo.com"

Websites that you need to be assigned for full detailed logging must be included as "Website for detailed logging / IP" to log the full link address. For example,
http://tw.news.yahoo.com/article/url/d/a/090911/17/1qwgx.html

Enter the main domain name for full detailed logging in the Website/IP field, click "Add " and then "Save" for the changes to take effect.



Service Configuration

Http:Specially appointed website Configuration

Need the detail record website/IP

Go To Page Every page Record

WebSite/IP

No	Need the detail record website/IP	Edit

IM QQ number:

IM:QQ Configuration

QQ Number

QQ Password

User Name (Within 20 limit bytes)

Go To /0 Page Every page 10 Record

No	User Name	QQ Number	Edit
----	-----------	-----------	------

QnoSniff Professional supports QQ specific monitoring among IM applications. The QQ accounts and passwords to be monitored "must" be entered into the system for monitoring and logging of QQ message.

Enter the QQ account/password to be monitored into the blank fields, click "Add " and then "Save" for the changes to take effect.

For example, enter the following information into the blank fields in order, QQ account is 12355639 with password 34568989, and the user ID is Sales1, then click "Add " then "Save" to take effect.

V. System and Authorization Management

This chapter includes the login accounts for QnoSniff Professional system administrator and users, in addition to system logs.

5.1 Privilege Configuration

Privilege configuration can be applied to a specific "account type" logging into QnoSniff Professional systems, that restricts the account's access to system logs and charts for different communication protocols.

Privilege Configuration

Database Accessment

Privilege Type	<input type="text"/>						
Protocol	HTTP	Email	IM	FTP	P2P	Telnet	Statistical chart
Privilege Configuration	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Privilege Type	View Privilege	Edit Privilege	Members	Edit
administrators		CHART, TELNET, P2P, IM, HTTP, EMAIL, FTP	1	
admin		CHART, TELNET, P2P, IM, HTTP, EMAIL, FTP	1	Edit
user		CHART, TELNET, P2P, IM, HTTP, EMAIL, FTP	0	Edit
defineuser		CHART, TELNET, P2P, IM, HTTP, EMAIL, FTP	0	Edit Delete

Privilege type:

Enter the name for the level of account that you wish to assign, for example Common User, while the administrator account has the highest level of authorization. The default is set to read/edit permissions to all logs and charts for all communication protocols, but cannot be modified or deleted.

Please note that there are 5 levels of system authorizations, from high to low: administrator, admin, user, defineuser, and self-defined. Newly added accounts are self-defined and have the lowest authorization level compared to the other four types. When modifying the account type, the user will only be able to change their own and the lower authorization account levels.

Communication protocol:

As the logging data collected by QnoSniff Professional are mostly based on communication protocols, access/edit permission and chart outputs are based on the logging data of various protocols.

*** Please note!**

Access/edit permission for each communication protocol is as specified in the Summary Info (communication protocol detailed list). The chart outputs will also be sorted by the communication protocol, but the individual access permissions cannot be set. They can only be set to "All" for the data and charts for access/edit permission settings.

Privilege configuration:

Access permission for each communication protocol and statistic chart.

N/A - Cannot read and cannot edit, the user control options will not be shown.

Read - The data can only be viewed and cannot be deleted/modified, the e-mail/PDF buttons cannot be used.

Edit - The data can be viewed, deleted, and e-mail/PDF function can be used.

Add:

Click this option after filling in the account info, the "New user added" message will popup and the new entry will be added to the list below.

Edit:

To modify the existing account, please click the "Edit" button to the right of the list entry. The contents will appear in the fields above ready for modification. Please click "Edit" after the contents are modified (the "Add" button will change to "Edit" under editing mode) and the system will prompt if you wish to modify the entry. Click OK

Cancel:

to complete the modification.

This will clear the data fields you have entered, or cancel the modification action.

5.2 User Management

After configuring the privilege level, you can add new accounts to each of the privilege levels as specified in "Privilege Configuration". The "User Management" accounts are the account/password/language settings that users use to login to the system. Similarly, based on the registered account level, the user will only be able to modify their own account information as well as add new or modify accounts with lower authorization levels. The highest level administrator can add other administrator level accounts, while non-administrator users cannot use this function.

User Management

Account

Password

Re-Key Password

Privilege

Email

Language

Account	Privilege Type	Email Account	Language	Edit
administrator	administrators	May_Zhou@email.LingAn.co...	English	Edit
admin	admin	admin@yahoo.com.cn	Simplified Chinese	Edit Delete
abc	user	abc@com.jp	Traditional Chinese	Edit Delete

- Account: Enter the account name for login
- Password: Enter the login password for this account
- Re-key password: Enter the same password for confirmation
- Privilege: Choose the account level from the pull down menu. Default levels include administrator, admin, user, and define user. Newly added or modified account levels will also show up in this pull down menu for selection.

- E-mail:** Enter the e-mail address for the account and for receiving the "e-mail" notification.
- Language:** Default system language as Traditional Chinese, Simplified Chinese, or English after the user is logged in.
- Add:** Click this option after filling in the account info, the "New user added" message will popup and the new entry will be added to the list below.
- Edit:** To modify the existing account, please click the "Edit" button to the right of the list entry. The contents will appear in the fields above ready for modification. Please click "Edit" after the contents are modified (the "Add " button will change to "Edit" under editing mode) and the system will prompt if you wish to modify the entry. Click OK to complete the modification.
- Cancel:** This will clear the data fields you have entered, or cancel the modification action.

*** Please note!**

By default, the preset "administrator" and "admin" login accounts include dummy e-mail addresses. Please remember to change to valid e-mail addresses to be able to receive the e-mail notification and report.

5.3 User log

User logs will show all user login, logout, and modification information etc. Only the administrator and admin level users on QnoSniff Professional will see the user log list after logging in. Other user levels will not be able to see the user logs.

PDF:


Converts the logs into PDF file for archiving or reference. Please click the "PDF" button to export.

Clear:

If the logs are no longer needed, click the "Clear " button to delete all logs.

/ page, _ records/page: Customize the number of entries on each page and directly jump to another page.

User Log

 PDF
 Clear

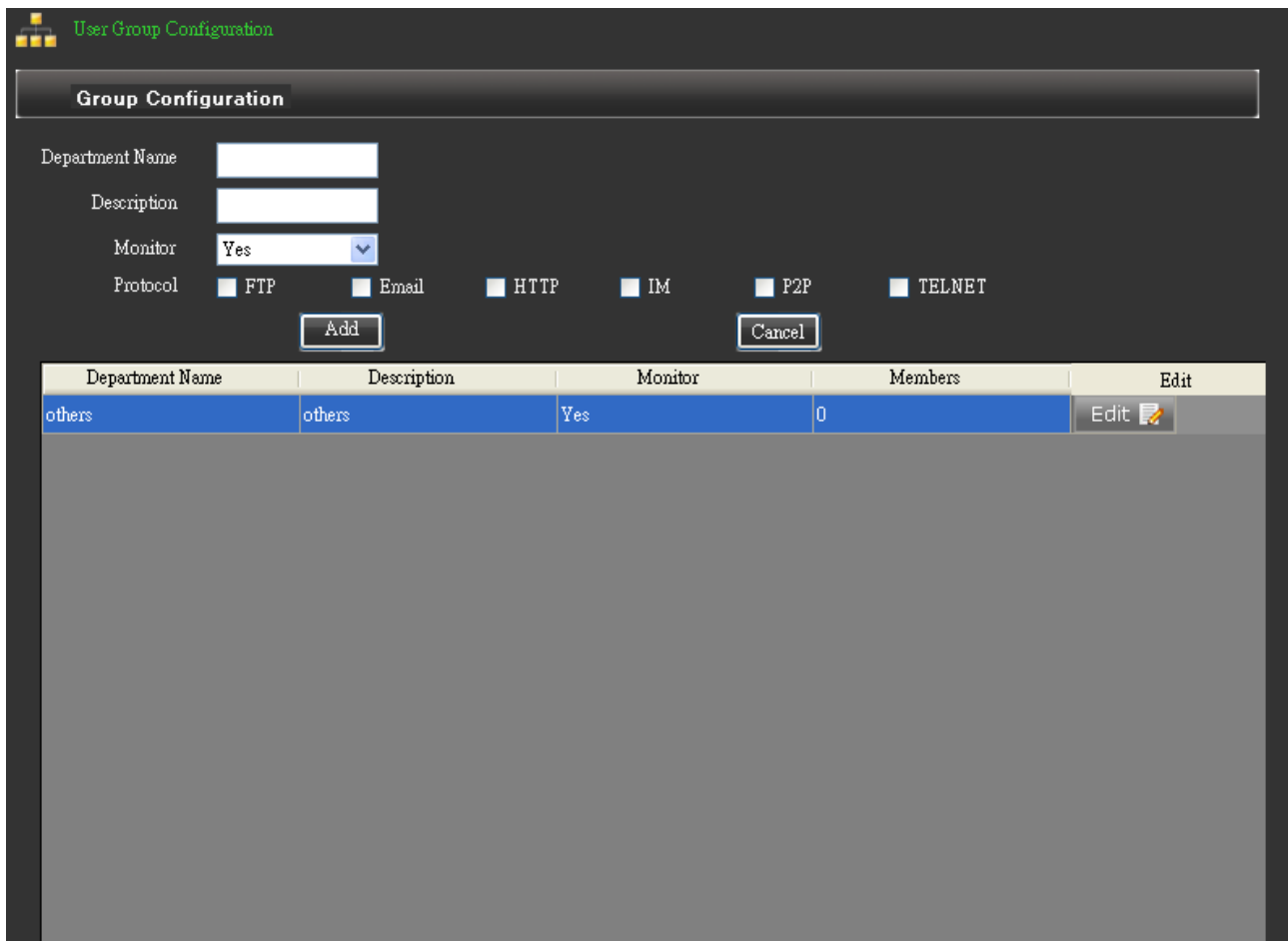
1 /2 Page
10 Records/Page


Log Time	Administrator account	Administrator IP address	Status information
2009-09-29 09:47:41	administrator	127.0.0.1	Login success
2009-09-29 09:49:40	administrator	127.0.0.1	Logout success
2009-09-29 09:51:31	administrator	127.0.0.1	Login success
2009-09-29 17:44:17	administrator	127.0.0.1	Update Member who Dept_ID is null...
2009-09-29 17:44:17	administrator	127.0.0.1	Update Member who Dept_ID is null...
2009-09-29 17:44:17	administrator	127.0.0.1	Update Member who Dept_ID is null...
2009-09-29 17:44:47	administrator	127.0.0.1	Modify Interface Confifuration: 離線
2009-09-29 17:45:10	administrator	127.0.0.1	Update Member who Dept_ID is null...
2009-09-29 17:45:10	administrator	127.0.0.1	Update Member who Dept_ID is null...
2009-09-29 17:45:10	administrator	127.0.0.1	Update Member who Dept_ID is null...

VI. User Group Configuration

This chapter includes the group management in QnoSniff Professional. User groups are convenient in centralized management as we would not need to set each user one-by-one, and changes can be applied to all users within the group. You can also assign groups based on the network usage situations, and take advantage of QnoSniff Professional to better match the behaviors of intranet users.

6.1 Department Setup



Department Name	Description	Monitor	Members	Edit
others	others	Yes	0	Edit 

Department name: Name for the specific department, e.g. Sales, RD.

Description: Brief description and notes on the department for identification.



- Monitor:** Monitoring and logging for the department.
- Protocol:** Departments will be monitored and logged by QnoSniff Professional on the specified communication protocols. To disable monitoring or if the department uses confidential information, e.g. higher management e-mail or IM messages, the exception items can be selected.
- Add:** Click this option after filling in the account info, the "New user added" message will popup and the new entry will be added to the list below.
- Edit:** To modify the existing account, please click the "Edit" button to the right of the list entry. The contents will appear in the fields above ready for modification. Please click "Edit" after the contents are modified (the "Add " button will change to "Edit" under editing mode) and the system will prompt if you wish to modify the entry. Click OK to complete the modification.
- Cancel:** This will clear the data fields you have entered, or cancel the modification action.

6.2 User List

The user list is for expanding the user groups and users. The users to be monitored by QnoSniff Professional must be added into the user list.

User List

Group/Department

... others (0)

User Name

IP Address

▼

MAC

Department

▼

Monitor

▼

IP MAC Learning

Add

Cancel

PDF

No	Department	Monitor	Startup Monitor Time	IP Address	MAC	User Name	Host Name/MAC	Edit

Username: Enter the name of the user, e.g. SalesPC1.

IP address: Enter the IP address of the user, e.g. 192.168.3.100

MAC: Either manually or from the pull down menu of automatically learned list of IP.

Enter the MAC address of the user, e.g. 00-1A-B6-02-3F-9A (please note the format with "-" spacing)

Department: Select the preset group to add the user from the pull down menu.

Monitor: Monitoring for this single user.

Please note that even if the user belongs to a group that is currently being monitored, setting the monitoring option for this single user to "No" (no monitoring) will exclude the user from monitoring. This setting is applied to a single user only.

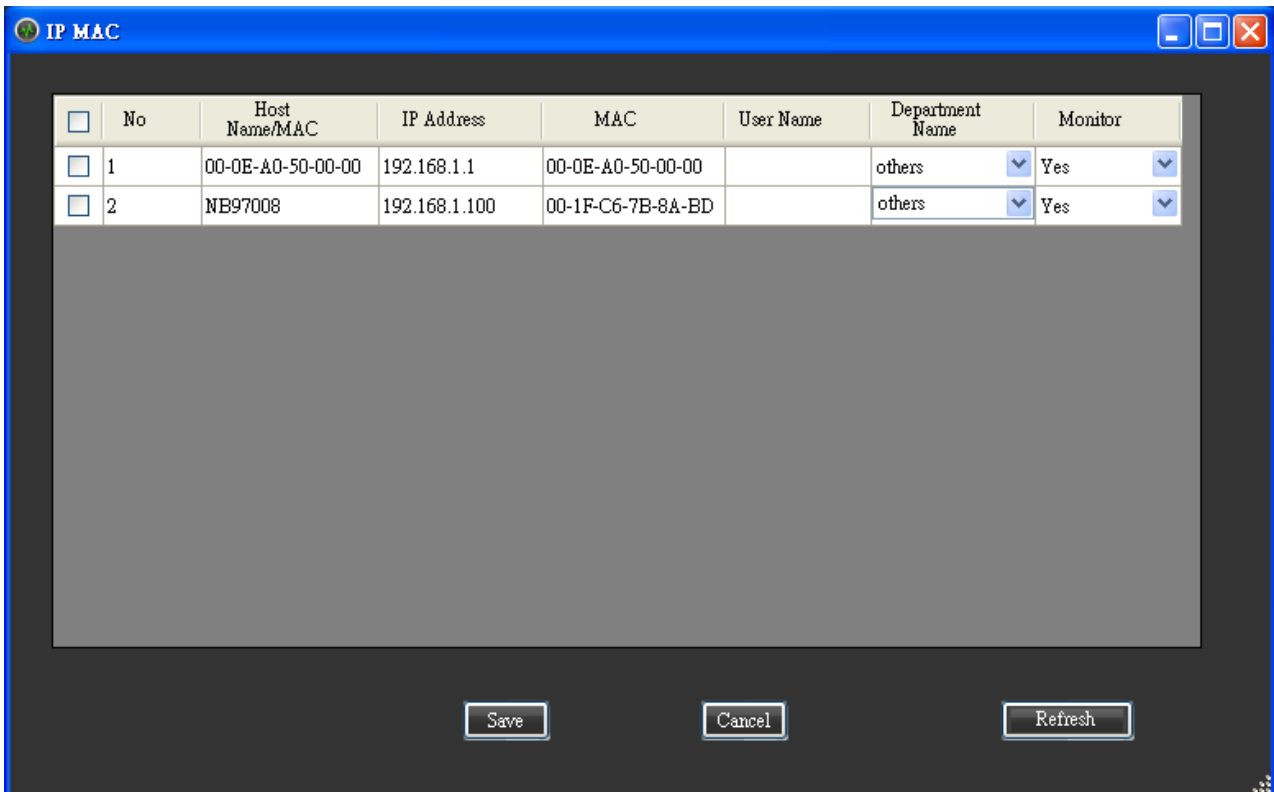
IP-MAC learning: If the intranet user list is readily available then it can be manually entered into the system, but will still require time and labor. QnoSniff Professional includes the IP-MAC automatic learning tool that can easily do the job for you.

Click the IP-MAC learning button and another window will popup to display the intranet user information QnoSniff Professional automatically obtained, including the computer name (or the MAC address will be shown), IP address, and MAC address. The username can be filled in and the department can be selected from the pull down menu. Specify whether the user is to be monitored and when all users have been configured, checkmark "All" and click "Save" to finish. This completes the grouping, monitoring, username setup for intranet users in one single process.

If any user information is missing in the window popup, click the "Refresh" button to run the learning process again.

*** Please note!**

Users that have been setup and added to the user list will not appear in the IP-MAC learning list. If the user IP address is changed after being added to the list, the original MAC address will be used to automatically update the new IP address for the existing user.



<input type="checkbox"/>	No	Host Name/MAC	IP Address	MAC	User Name	Department Name	Monitor
<input type="checkbox"/>	1	00-0E-A0-50-00-00	192.168.1.1	00-0E-A0-50-00-00		others	Yes
<input type="checkbox"/>	2	NB97008	192.168.1.100	00-1F-C6-7B-8A-BD		others	Yes

User list added

*** Please note!**

IP-MAC automatic learning process is based on the ARP inquiries sent to all user computers within the same subnet of the intranet network. If your intranet PC is behind a firewall, the user information might not be detectable by QnoSniff Professional.

User List

Group/Department

- [-] others (1)
 - test001
- [-] Sales (1)
 - test002


User Name:





IP Address:

MAC:

Department:

Monitor:



No	Department	Monitor	Startup Monitor Time	IP Address	MAC	User Name	Host Name/MAC	Edit
1	others	Yes	2009-09-29 19:32:33	192.168.1.100	00-1F-C6-7B...	test001	NB97008	Edit  Delete 
2	Sales	Yes	2009-09-29 19:32:44	192.168.1.1	00-0E-A0-50...	test002	00-0E-A0-50...	Edit  Delete 

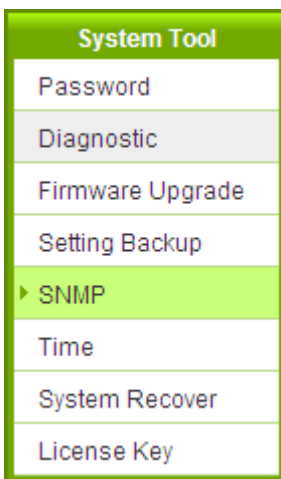
* The first timestamp for monitoring is when the user is added to the list and the monitoring option is set to "Yes".

VII. System Resource and Analysis

This chapter includes the router information as monitored by the QnoSniff Professional enabled PC, including CPU usage, memory usage, and upstream/downstream data for each WAN interface on the router.

7.1 CPU usage

Regardless of the CPU usage, memory usage, or WAN traffic flow on the router, the SNMP function must be enabled on the router in order for QnoSniff Professional to correctly capture the information. Go to the router management page "System Tool" => "SNMP" and make sure that SNMP is enabled.



▶ SNMP

Enabled

System Name :	<input type="text" value="4_WAN_Gigabit_Router"/>
System Contact :	<input type="text"/>
System Location :	<input type="text"/>
Get Community Name :	<input type="text" value="public"/>
Set Community Name :	<input type="text" value="private"/>
Trap Community Name :	<input type="text" value="public"/>
Send SNMP Trap to :	<input type="text"/>

Return to the system resource page of QnoSniff Professional. The left hand side of the CPU usage page

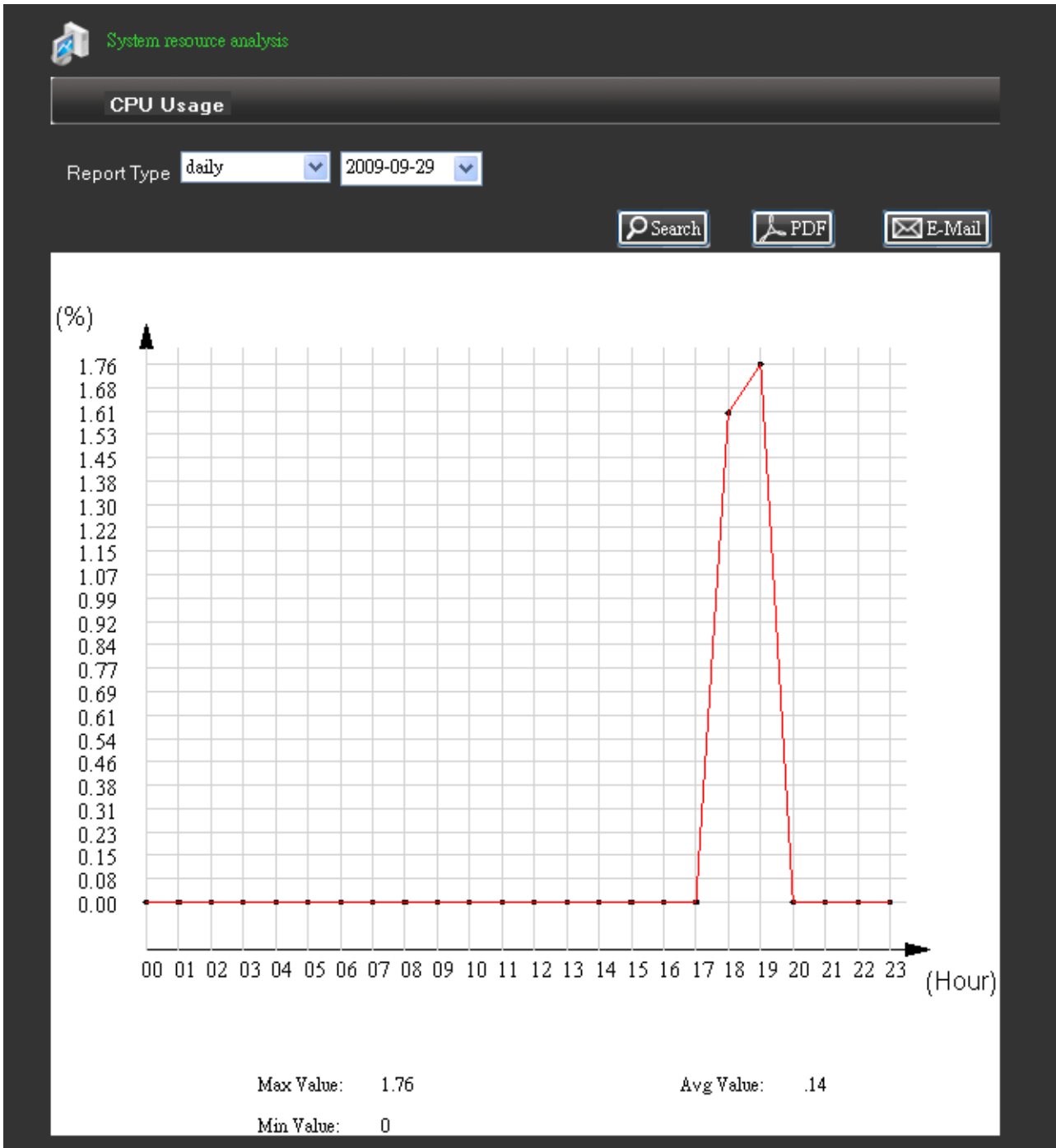
shows the daily report, weekly report, monthly report and custom report. The calendar is shown on the right



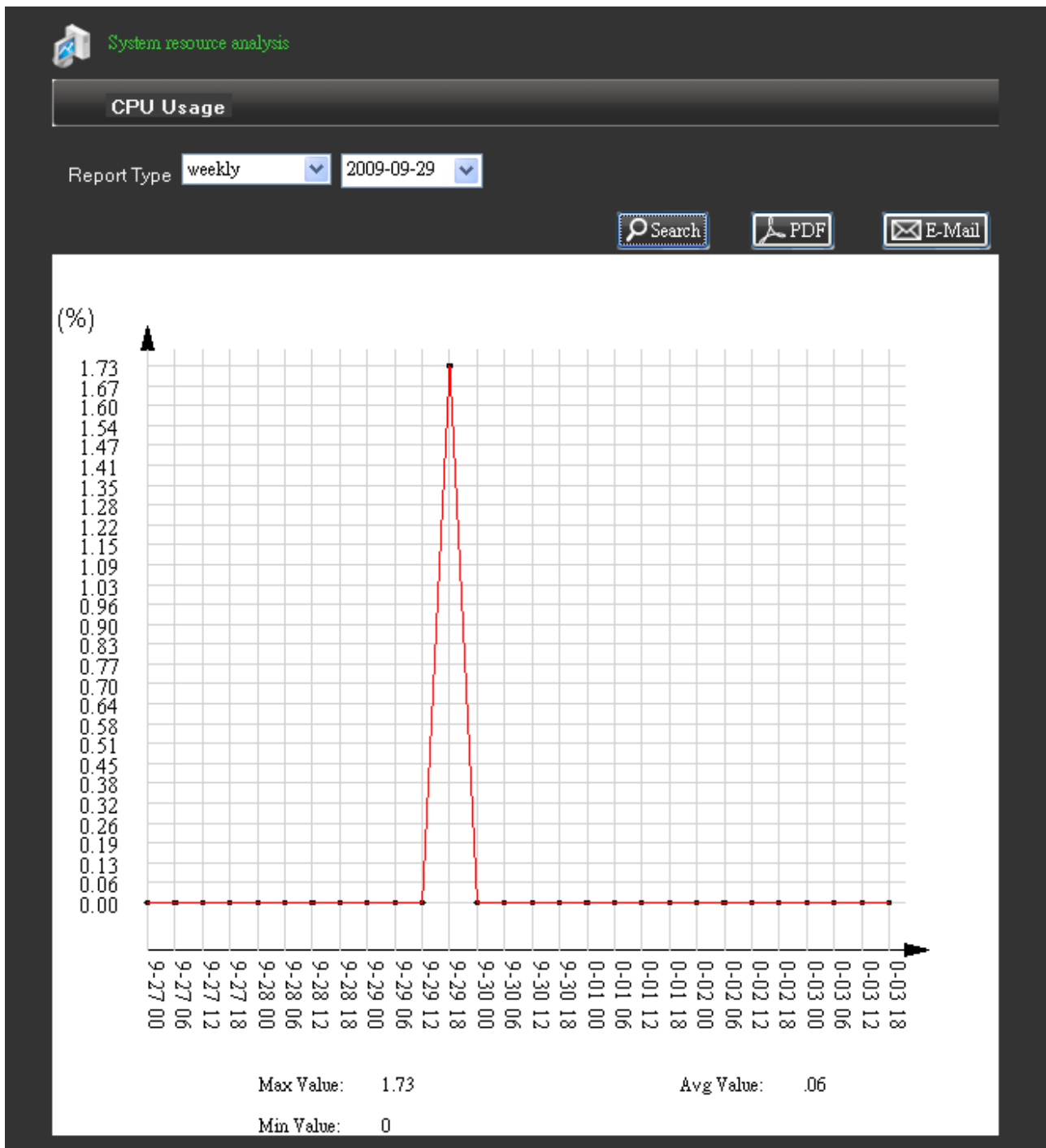
and can be directly clicked on to show the line chart with the max, min,

average values within the time period shown under the chart. The calendar report is as described below:

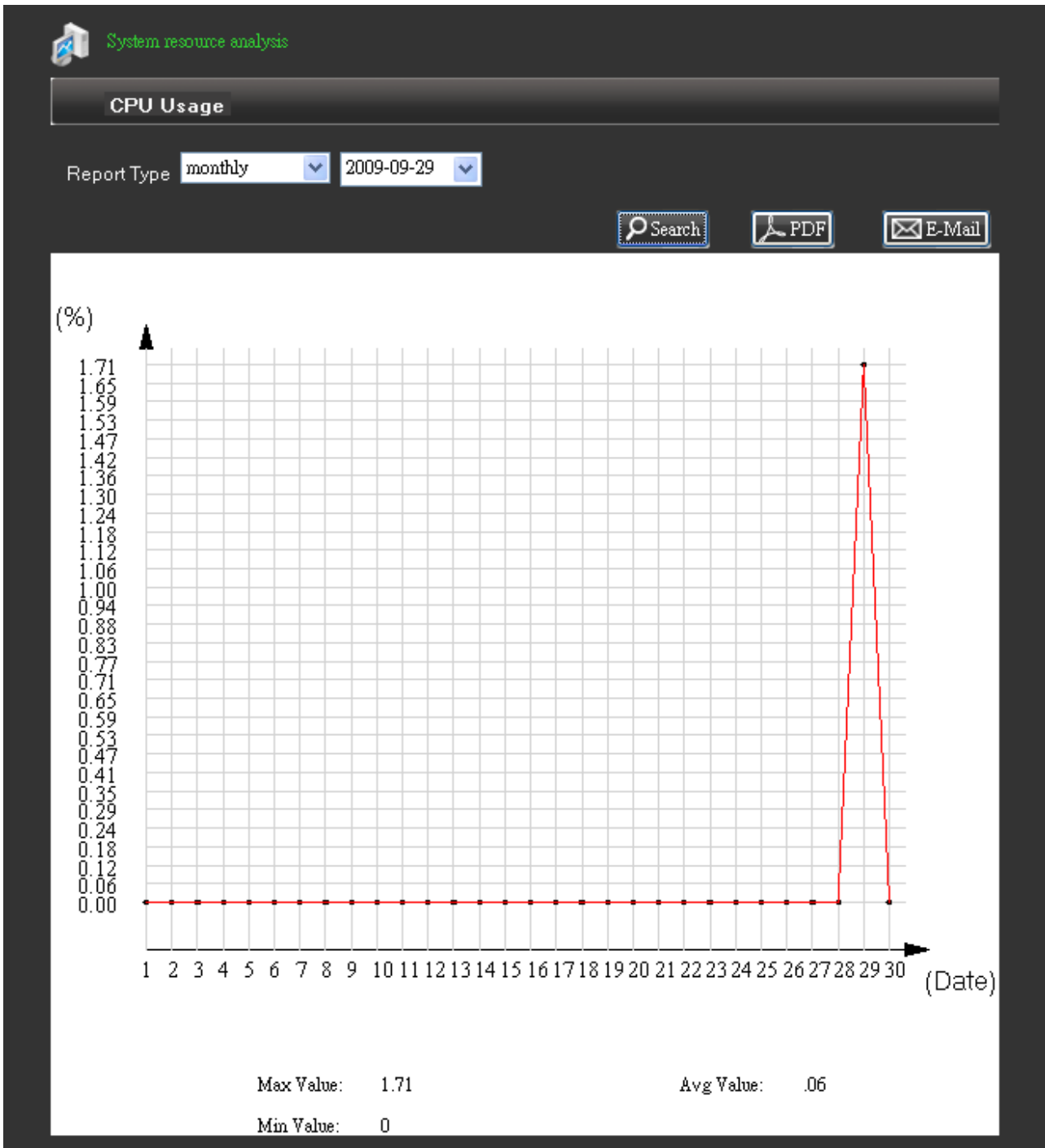
[1] Select daily report: Select the date on the calendar to indicate the CPU usage for the day (0 ~ 24 hr). For example, selecting 9/29/09 indicates the CPU usage record for the day on 9/29/09.



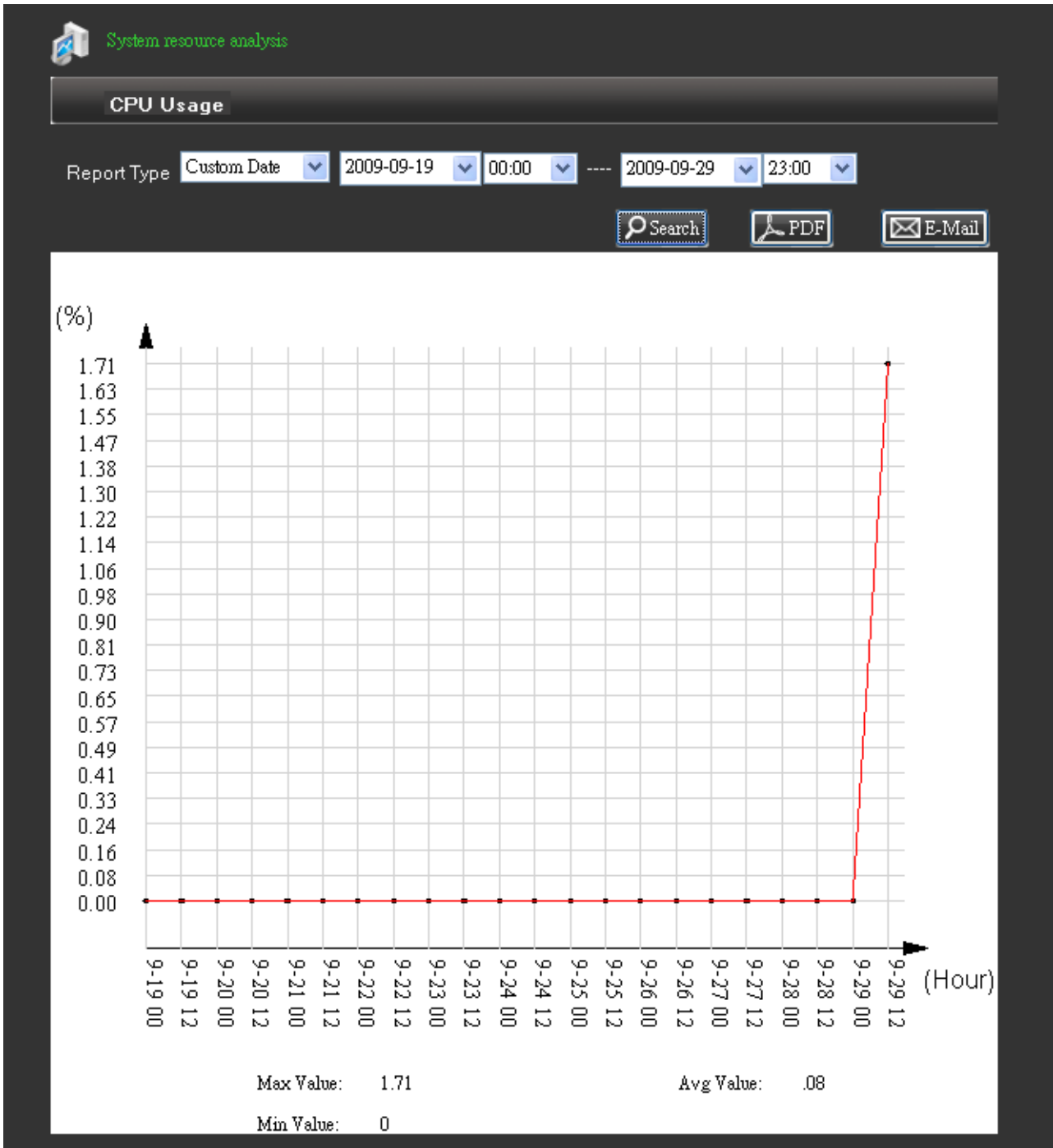
[2] Select weekly report: Select the date on the calendar to indicate the CPU usage for the week the date falls within. For example, selecting 9/14/09 indicates the CPU usage record for the week between 9/14/09 and 9/20/09.



[3] Select monthly report: Select the date on the calendar to indicate the CPU usage for the month the date falls within. For example, selecting 2009/29 indicates the CPU usage record for the month of September 2009.



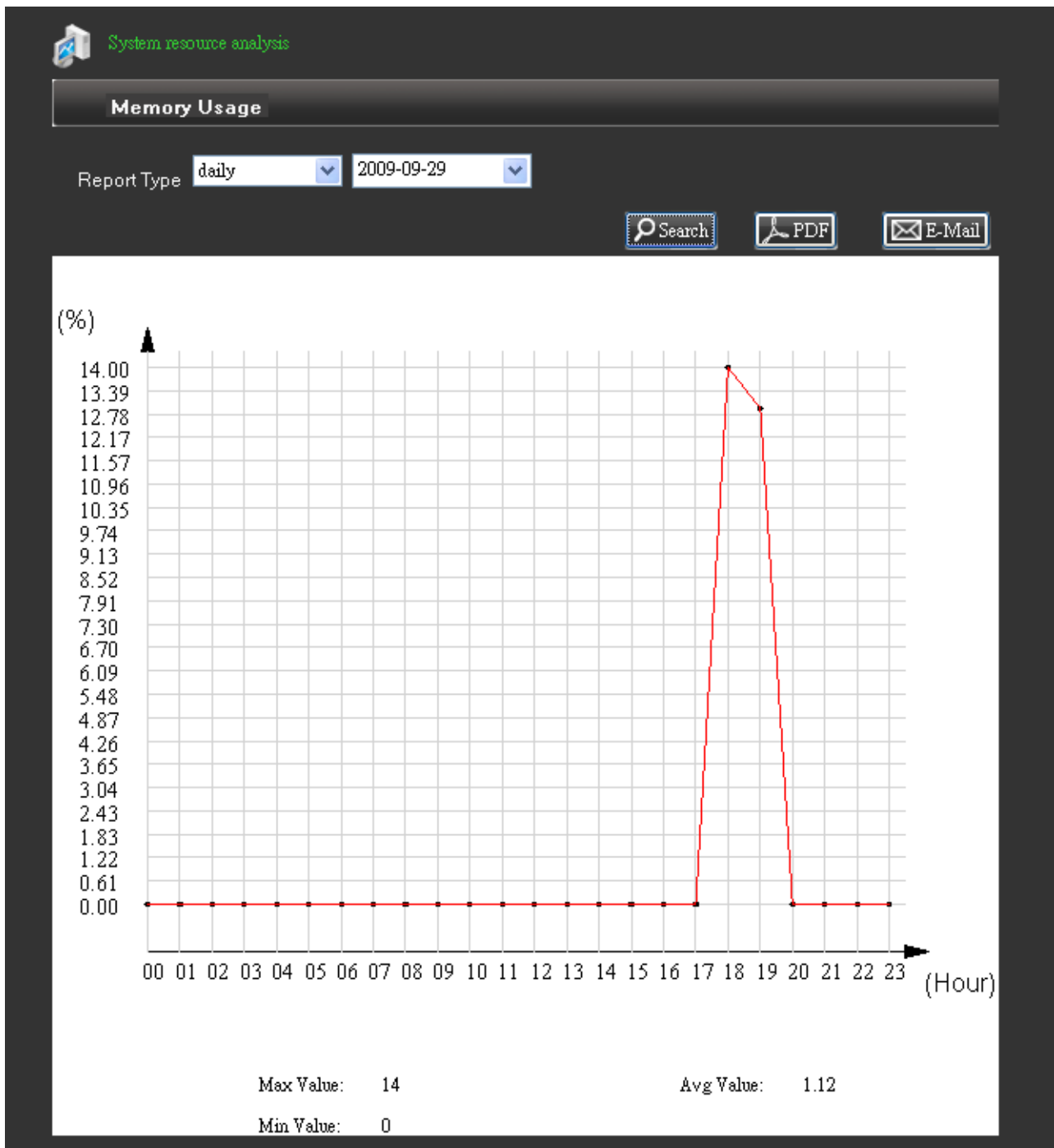
[4] Select custom report: Select a period of time for data lookup between 2 two calendar months in 24-hr format up to 32 days. The custom search criteria (non-default) will require longer processing time to present the data.



Please note: Please click the "Search" button after selecting the time period from above. As the data will only be updated when the page is first loaded, please click the "Search" button again if the time period has been changed. The local installation version supports PDF and e-mail functions, and the web version supports e-mail function only.

7.2 Memory usage

This indicates the system memory usage on the router presented in percentage.

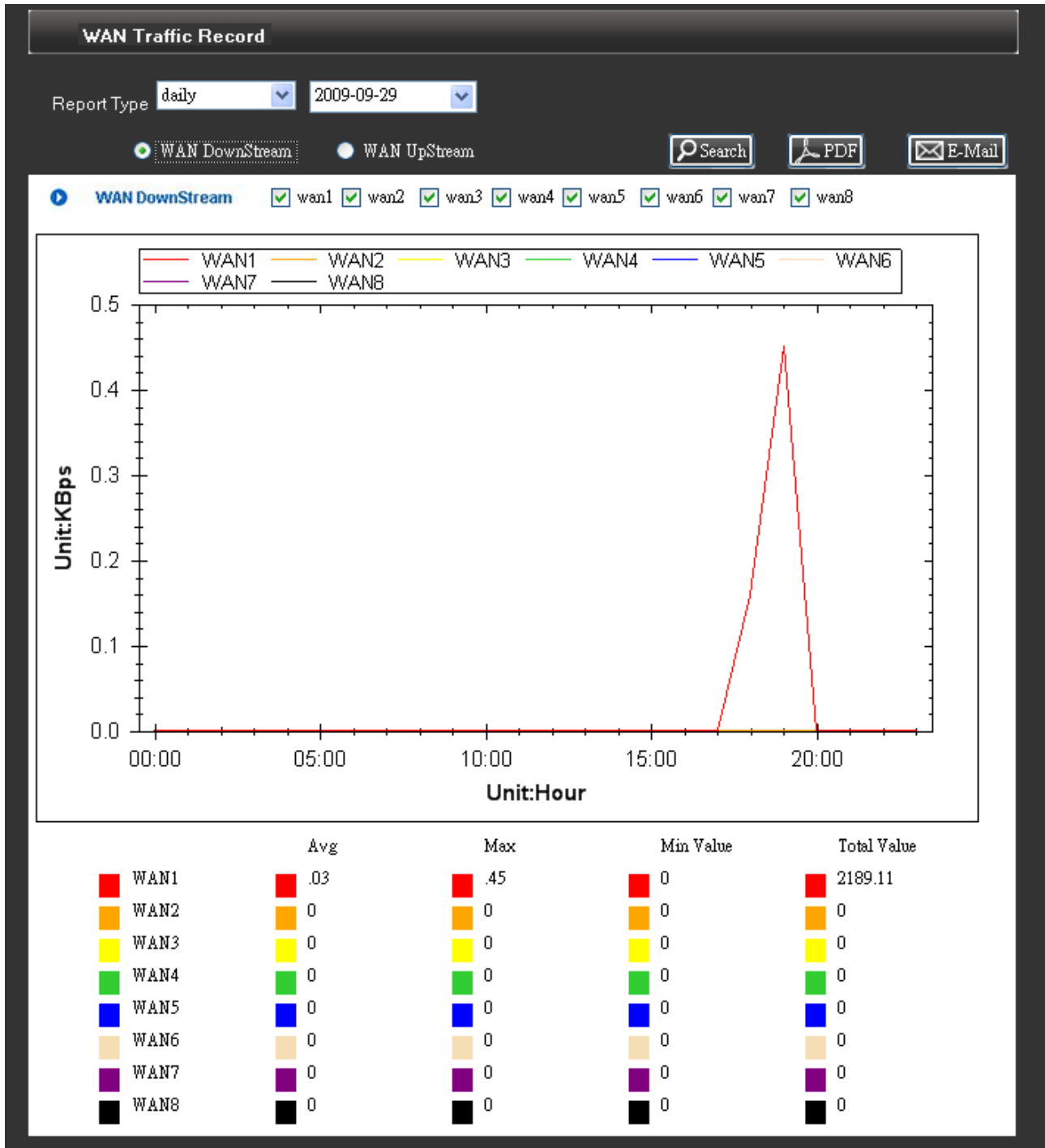


Selection of time period is identical with the CPU usage and can be customized to review the router memory

usage within different time periods.

7.3 WAN Traffic

WAN traffic includes upstream and downstream data. You can select the specific WAN interface to monitor and display the traffic flow.



The average, max, min traffic data (within the designated time period) for the selected WAN interface will be shown at the bottom.

VIII. Summary

Core functions of QnoSniff Professional - Monitoring and logging of communication protocols.

Communication protocols supported by QnoSniff Professional include the following:

- (1) Web browsing (HTTP)
- (2) e-mail (SMTP and POP3)
- (3) File transfer (FTP)
- (4) Point to point downlad (P2P)
- (5) TELNET
- (6) Instant messaging (IM)

In the following section we will introduce the monitoring and logging features for various services and traffic data.

8.1 Real-time Status

The real-time status includes network traffic for all users on the same day; therefore, the data will only be accumulated for one single day. Logging into the page the next day will present you with the intranet user traffic data for the next day.

Real-Time Traffic Status

Select Department
Total

Goto 1 / 1Page Every Page Has 10 Rows Refresh Mail

No	User Name	Host Name/MAC	Department	IM	HTTP	FTP	EMAIL	TELNET	Bandwidth(KB)	IP Address	Monitor Start Time
1	test001	NB97008	others	0	1	0	0	0	466.8	192.168.1.100	2009-10-19 16:11:24
2	test002	00-0E-A0-50-00-00	Sales	0	0	0	0	0	0.0	192.168.1.1	2009-10-19 16:13:37

This list contains the following traffic data for different communication protocol of each user, including instant messaging logs, web page browsing, FTP, e-mail records, Telnet logs and traffic flow (bandwidth ratio). The hyperlink is available for each communication protocol that links to the detailed records for the individual user as shown below (using FTP as example).

Traffic Information

File Transfer Information

Search Rule 1 Date from 2009-09-01 to 2009-10-19

Search Rule 2 IP Address Search File Name Encoding BIG5

Search Rule 3 User Name Mail Delete

Previous 10 Pages Previous Page Go To 1 page Every Page 10 Record Next Page Next 10 Pages

Select All	Date/Time	IP Address	User Name	Host Name/MAC	FTP Server	FTP Account	Direction	File Name	File Size (K B)
<input type="checkbox"/>	2009-09-29 23:49:22	192.168.0.162		00-23-F8-2C-39-F9	61.220.58.43	Anonymous	DownLoad	version.ini	0.191
<input type="checkbox"/>	2009-09-30 00:00:40	192.168.0.213		00-1A-4D-81-D6-F5	210.64.12.133	Anonymous	DownLoad	god_crc.txtZ	10.602
<input type="checkbox"/>	2009-09-30 00:23:17	192.168.0.117		00-1C-25-33-4D-4D	210.64.12.133	Anonymous	DownLoad	god_crc.txtZ	10.602
<input type="checkbox"/>	2009-09-30 00:23:18	192.168.0.117		00-1C-25-33-4D-4D	210.64.12.133	Anonymous	DownLoad	MJResource.dll	45.568
<input type="checkbox"/>	2009-09-30 00:23:19	192.168.0.117		00-1C-25-33-4D-4D	210.64.12.133	Anonymous	DownLoad	R6.rom	37.158
<input type="checkbox"/>	2009-09-30 00:23:19	192.168.0.117		00-1C-25-33-4D-4D	210.64.12.133	Anonymous	DownLoad	Table.rom	1020.931
<input type="checkbox"/>	2009-09-30 01:17:40	192.168.0.162		00-23-F8-2C-39-F9	61.220.58.43	Anonymous	DownLoad	version.ini	0.191

8.2 Web information

Web browsing is the web page browsing history of the user, and the http communication protocol is being monitored.

Web Browsing Information

Search Rule 1 Date from 2009-09-01 to 2009-10-19

Search Rule 2 IP Address Search

Search Rule 3 User Name Mail Delete

Previous 10 Pages Previous Page goto 1 page every page has 10 rows Next Page Next 10 Pages

Select All	Date/Time	IP Address	User Name	Host Name/MAC	Website	Website IP Address	Record
<input type="checkbox"/>	2009-09-28 16:56:42	192.168.1.62		MYCHAT-22121F EF	HTTP://TW.BOOKMARKS.YAHOO.COM/	209.131.36.250	1
<input type="checkbox"/>	2009-09-28 16:56:42	192.168.2.138		00-15-F2-41-E0-C0	HTTP://89.202.157.227/	89.202.157.227	1
<input type="checkbox"/>	2009-09-28 16:56:43	192.168.0.190		MYCHAT-C1963F 87	HTTP://TW.NEWS.YAHOO.COM/	202.43.215.28	1
<input type="checkbox"/>	2009-09-28 16:56:44	192.168.0.190		MYCHAT-C1963F 87	HTTP://WWW.PTS.ORG.TW/	61.67.73.13	1
<input type="checkbox"/>	2009-09-28 16:56:44	192.168.0.190		MYCHAT-C1963F 87	HTTP://ZH-TW.FXFEEDS.MOZILLA.COM/	63.245.209.93	1
<input type="checkbox"/>	2009-09-28 16:56:45	192.168.0.188		00-1D-7D-08-D5-6 0	HTTP://STATIC.AK.FBCDN.NET/	203.69.113.26	1
<input type="checkbox"/>	2009-09-28 16:56:46	192.168.0.188		00-1D-7D-08-D5-6 0	HTTP://02687923841.CHANNEL58.FACEBOOK.COM/	69.63.178.128	1

Search Rule 1 Select the date/time range to lookup data.

Date/Time:

Search Rule 2, Search Select the search filters below

Rule 3:

IP address, user name, computer name/MAC address, website address

*** Please note!**

If all three of the search filters are specified for the real-time status and the communication protocol lists, the search result must match all three filter criteria; if only two are specified, both of the search filters must be matched; if only one is specified, then only the single search filter must be matched.

Search: After specifying the search filter, click "Search" button to update the data list.

E-mail: Each login account will come with a specific e-mail inbox (from "System and authorization management" => "Privilege configuration") that the e-mail function can send current page you are viewing in the PDF format.

Delete:	Put a checkmark in the box to the left of each entry in the list to set for deletion.
PDF (only available on local installation version):	If logging in from the PC with QnoSniff Professional installed, click on the "PDF" button to convert the page into a PDF file to be saved on another hard drive or directory.
Previous 10 pages:	Click this button to jump back 10 pages. For example, if you are at 201st data entry with 10 entries shown on each page, click on the "Previous 10 pages" button to jump to the page with the 101st data entry.
Previous page:	Go to the previous page on the list.
Next page:	Go to the next page on the list.
Next 10 pages:	Click this button to jump forward 10 pages. For example, if you are at 1st data entry with 10 entries shown on each page, click on the "Next 10 pages" button to jump to the page with the 101st data entry.
Go to page ___	Specify the number of entries shown on each page for 10, 30, 50, 100 entries; or use the pull down menu to directly jump to the page number to view.
Every page _ records	

Data list columns

Date / time:	User access timestamp
IP address:	User IP
Username:	Name of user
Host name/ MAC:	Name or MAC address of the user's computer (the MAC address will be shown if the computer name cannot be resolved)
Website:	Name of website the user visited
Website IP Address:	The IP address of the website the user visited

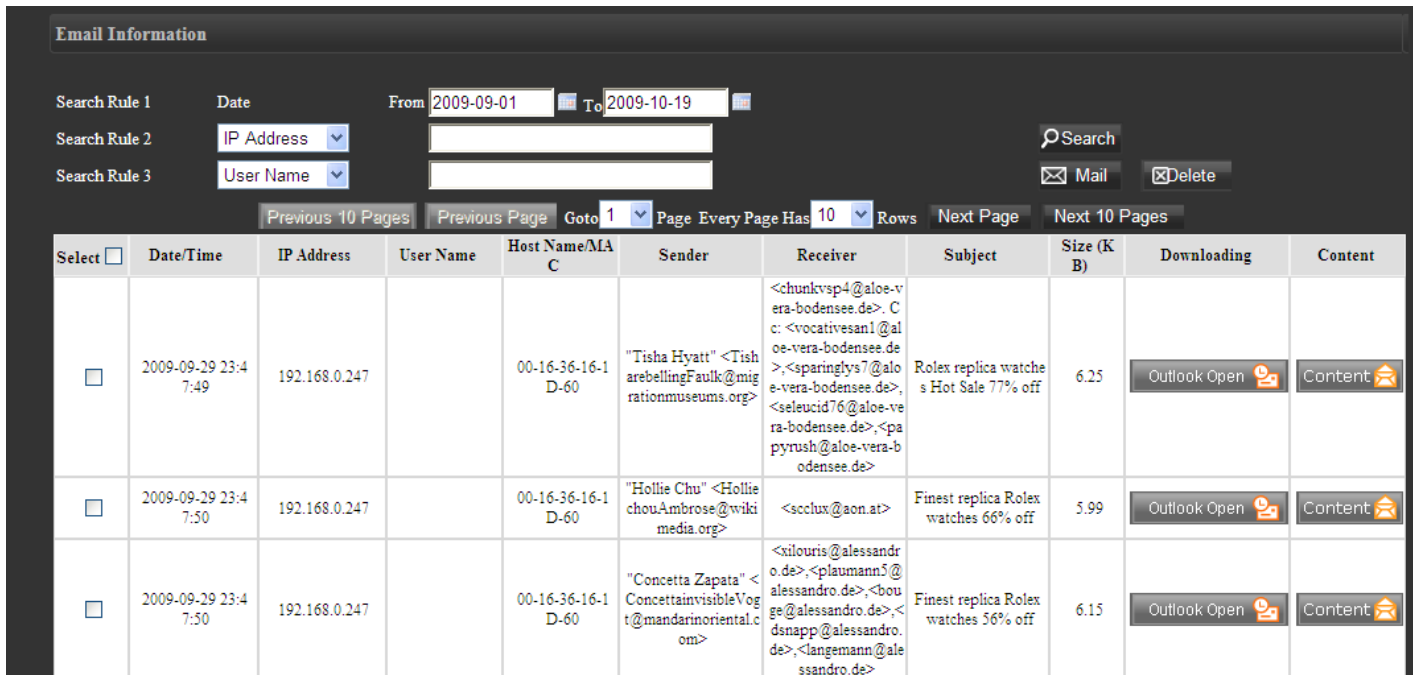
Record: Number of times the website is visited (increments by 1 count every 15 minutes)

*** Please note!**

Even if the website domain name is the same (e.g. tw.yahoo.com), the different corresponding IP address will count towards a separate data entry; The user visit count for a single website will increment by 1 every 15 minutes. In other words, all visits to the same website (including the domain name and full web address) within the 15 minutes will count as 1 visit.

8.3 E-mail information

The user e-mail records are monitored by the standard SMPT and POP3 communication protocols.



Select	Date/Time	IP Address	User Name	Host Name/MAC	Sender	Receiver	Subject	Size (KB)	Downloading	Content
<input type="checkbox"/>	2009-09-29 23:47:49	192.168.0.247		00-16-36-16-1D-60	"Tisha Hyatt" <Tisha.rebell@migrationmuseums.org>	<chunkvsp4@aloe-vera-bodensee.de>, Cc: <vocativesan1@aloe-vera-bodensee.de>, <sparinglys7@aloe-vera-bodensee.de>, <seleucid76@aloe-vera-bodensee.de>, <pyrush@aloe-vera-bodensee.de>	Rolex replica watches Hot Sale 77% off	6.25	Outlook Open	Content
<input type="checkbox"/>	2009-09-29 23:47:50	192.168.0.247		00-16-36-16-1D-60	"Hollie Chu" <Hollie.chou.Ambrose@wikimedia.org>	<seclux@aon.at>	Finest replica Rolex watches 66% off	5.99	Outlook Open	Content
<input type="checkbox"/>	2009-09-29 23:47:50	192.168.0.247		00-16-36-16-1D-60	"Concetta Zapata" <ConcettainvisibleVogt@mandarinoriental.com>	<xilouris@alessandro.de>, <plaumann5@alessandro.de>, <bouge@alessandro.de>, <dsnapp@alessandro.de>, <langemann@alessandro.de>	Finest replica Rolex watches 56% off	6.15	Outlook Open	Content

Search rule 1 Date/ Select the date/time range to lookup data.

Time:

Search rule 2, Select the search filters below

Search rule 3: IP address, username, computer name / MAC address, sender e-mail address, recipient e-mail address, subject of e-mail

Search: After specifying the search filter, click "Search" button to update the data list.

E-mail: Each login account will come with a specific e-mail inbox (from "System and Authorization Management" => "User Management") that the e-mail function can send current page you are viewing in the PDF format.

Delete: Put a checkmark in the box to the left of each entry in the list to set for deletion.

PDF (only available on local installation version): If logging in from the PC with QnoSniff Professional installed, click on the "PDF" button to convert the page into a PDF file to be saved on another hard drive or directory.

Previous 10 pages:	Click this button to jump back 10 pages. For example, if you are at 201st data entry with 10 entries shown on each page, click on the "Previous 10 pages" button to jump to the page with the 101st data entry.
Previous page:	Go to the previous page on the list.
Next page:	Go to the next page on the list.
Next 10 pages:	Click this button to jump forward 10 pages. For example, if you are at 1st data entry with 10 entries shown on each page, click on the "Next 10 pages" button to jump to the page with the 101st data entry.
Go to page ____	Specify the number of entries shown on each page for 10, 30, 50, 100 entries; or use the pull down menu to directly jump to the page number to view.
Every page _ records	

Data list columns

Date / time:	Timestamp for the e-mail
IP address:	Sender/recipient IP address for the e-mail
Username:	Sender/recipient username for the e-mail
Host name/ MAC:	Sender/recipient computer name or MAC address for the e-mail (the MAC address will be shown if the computer name cannot be resolved)
Sender:	Sender of e-mail
Recipient:	Recipient of e-mail
Subject:	Subject of e-mail
Size:	Size of e-mail (including body and attachments)
Downloading:	"Outlook Open" button is used to open e-mail messages with Outlook or Windows Mail. The e-mail can be first downloaded and saved to the local drive, then opened in Outlook to open/save the attachment file.

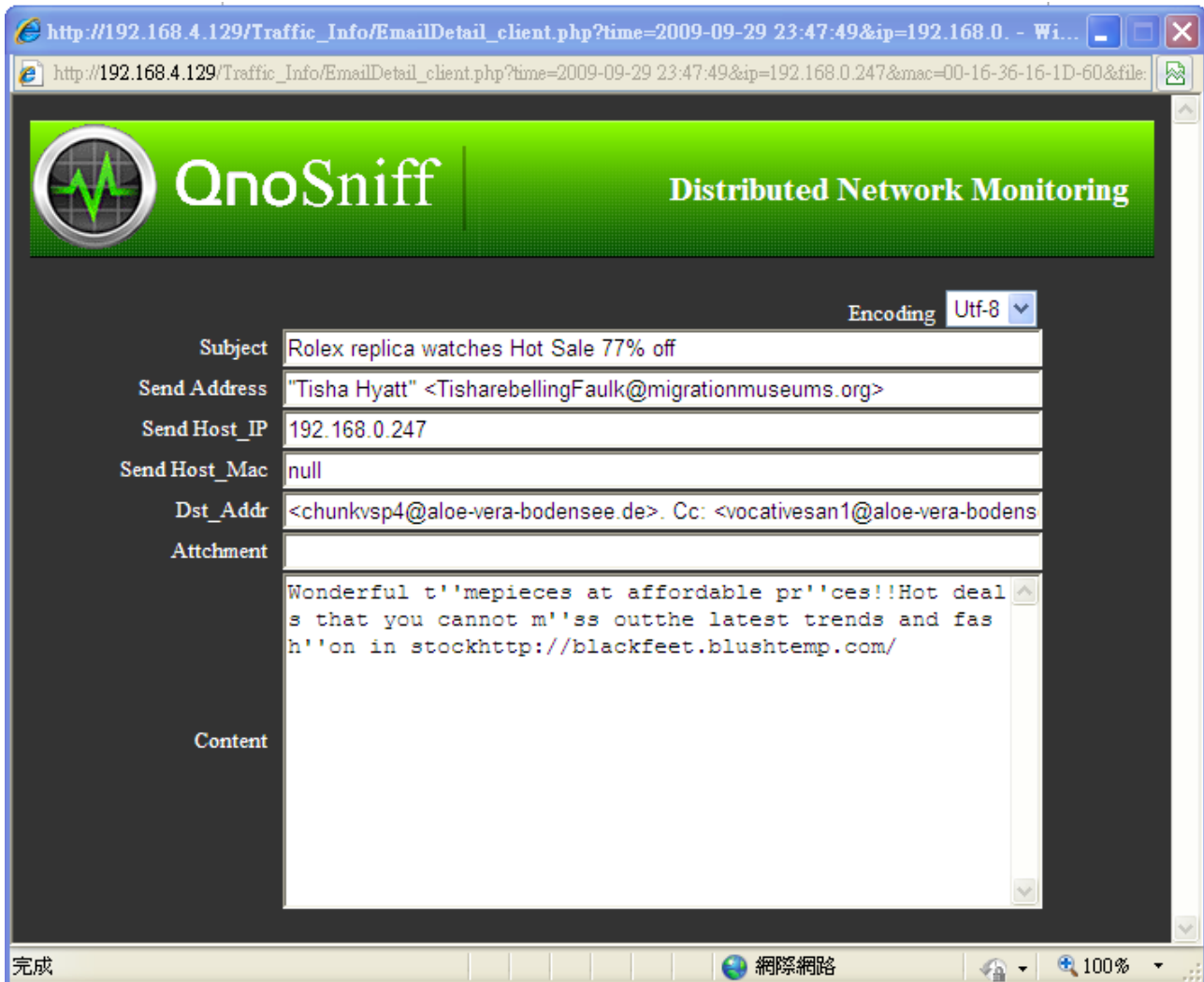
*** Please note!**

If remotely logged in from the web or directly opening the e-mail by clicking "Outlook Open", the mail will be displayed in the default html application. The example below uses Firefox to directly open and display the e-mail message. (Select the language encoding from the menu in the upper right side for English, Traditional Chinese, Simplified Chinese)



Content: "Content" button opens the e-mail with the built-in application of QnoSniff Professional, and therefore can only be displayed in pure text format. The attachment filename will only be shown and cannot be opened or saved. This method is more suitable for quickly viewing e-mail messages with pure text contents.

The upper right menu can be used to select between Traditional Chinese, Simplified Chinese, and UTF-8 encoding to display the e-mail contents. If your message is displayed in random characters due to a different character encoding used, please switch to another language type.



The screenshot displays the QnoSniff Professional 2.0 interface within a web browser window. The browser's address bar shows the URL: `http://192.168.4.129/Traffic_Info/EmailDetail_client.php?time=2009-09-29 23:47:49&ip=192.168.0.247&mac=00-16-36-16-1D-60&file:`. The interface features a green header with the QnoSniff logo and the text "Distributed Network Monitoring". Below the header, there is a table of email metadata and a content area. The metadata includes fields for Subject, Send Address, Send Host_IP, Send Host_Mac, Dst_Addr, and Attachment. The content area displays the body text of the email, which appears to be a promotional message for a sale.

	Encoding <input type="button" value="Utf-8"/>
Subject	Rolex replica watches Hot Sale 77% off
Send Address	"Tisha Hyatt" <TisharebellingFaulk@migrationmuseums.org>
Send Host_IP	192.168.0.247
Send Host_Mac	null
Dst_Addr	<chunkvsp4@aloe-vera-bodensee.de>. Cc: <vocativesan1@aloe-vera-bodens
Attachment	
Content	Wonderful t'mepieces at affordable pr''ces!!Hot deal s that you cannot m''ss outthe latest trends and fas h''on in stock http://blackfeet.blushtemp.com/

8.4 FTP information

File transfer in QnoSniff Professional refers to the standard FTP protocol including active and passive modes. Other encrypted type file transfer protocols (e.g. SFTP, FTPS, FTPES etc.) are not supported by QnoSniff Professional and cannot be monitored.

Select All	Date/Time	IP Address	User Name	Host Name/MAC	FTP Server	FTP Account	Direction	File Name	File Size (K B)
<input type="checkbox"/>	2009-09-29 23:49:22	192.168.0.162		00-23-F8-2C-39-F9	61.220.58.43	Anonymous	Download	version.ini	0.191
<input type="checkbox"/>	2009-09-30 00:00:40	192.168.0.213		00-1A-4D-81-D6-F5	210.64.12.133	Anonymous	Download	god_crc.txtZ	10.602
<input type="checkbox"/>	2009-09-30 00:23:17	192.168.0.117		00-1C-25-33-4D-4D	210.64.12.133	Anonymous	Download	god_crc.txtZ	10.602
<input type="checkbox"/>	2009-09-30 00:23:18	192.168.0.117		00-1C-25-33-4D-4D	210.64.12.133	Anonymous	Download	MJResource.dll	45.568
<input type="checkbox"/>	2009-09-30 00:23:19	192.168.0.117		00-1C-25-33-4D-4D	210.64.12.133	Anonymous	Download	R6.rom	37.158
<input type="checkbox"/>	2009-09-30 00:23:19	192.168.0.117		00-1C-25-33-4D-4D	210.64.12.133	Anonymous	Download	Table.rom	1020.931
<input type="checkbox"/>	2009-09-30 01:17:40	192.168.0.162		00-23-F8-2C-39-F9	61.220.58.43	Anonymous	Download	version.ini	0.191

- Search rule 1 Date/ Select the date/time range to lookup data.
- Time:
- Search rule 2 Select the search filters below
- Search rule 3: IP address, username, computer name / MAC address, FTP server, FTP account, direction, file name
- Search: After specifying the search filter, click "Search" button to update the data list.
- E-mail: Each login account will come with a specific e-mail inbox (from "System and Authorization Management" => "User Management") that the e-mail function can send current page you are viewing in the PDF format.
- Delete: Put a checkmark in the box to the left of each entry in the list to set for deletion.
- PDF (only available on local installation version): If logging in from the PC with QnoSniff Professional installed, click on the "PDF" button to convert the page into a PDF file to be saved on another hard drive or directory.

Previous 10 pages:	Click this button to jump back 10 pages. For example, if you are at 201st data entry with 10 entries shown on each page, click on the "Previous 10 pages" button to jump to the page with the 101st data entry.
Previous page:	Go to the previous page on the list.
Next page:	Go to the next page on the list.
Next 10 pages:	Click this button to jump forward 10 pages. For example, if you are at 1st data entry with 10 entries shown on each page, click on the "Next 10 pages" button to jump to the page with the 101st data entry.
Go to page ___	Specify the number of entries shown on each page for 10, 30, 50, 100 entries; or use the pull down menu to directly jump to the page number to view.
Every page _ records	

Data list columns

All:	Put a checkmark in this box to select all entries on this page to be marked for deletion.
Date / time:	Time and date of the FTP upload/download record.
IP address:	Intranet IP address of the FTP upload/download record.
Username:	Intranet username of the FTP upload/download record.
Host name / MAC:	Intranet computer name or MAC address of the FTP upload/download record.
FTP server:	FTP server IP address of the FTP upload/download record.
FTP account:	FTP login account of the FTP upload/download record.
Direction:	Direction (upload or download) of the FTP upload/download record.
File name:	Name of target file of the FTP upload/download record. Click on the hyperlink to save or directly open the file with the designated program.

*** Please note!**

If the "Basic Setup" => "Database management" => "File size limit" has been set (e.g. 10MB), target files for FTP upload/download larger than the size limit cannot be completely archived to the database. The database will only archive up to the preset size limit (the original file size will still be displayed in the file size column) and therefore attempts to open the file may fail due to this size limit resulting in an incomplete file.

File size (KB):

Size of target of the FTP upload/download record.

*** Please note!**

The database will only save the FTP files up to this size limit and discards the excess data. However, the original file size will be saved for calculating the actual bandwidth flow.

8.5 P2P information

QnoSniff Professional supports monitoring and logging for common P2P sharing programs, and can determine the transmission protocol and bandwidth flow used by these P2P programs. QnoSniff Professional may include further updates for identifying various P2P software and transmission protocols.

P2P Traffic Information

Search Rule 1 Date From To Search

Search Rule 2 IP Address Mail Delete

Previous 10 Pages Previous Page Goto Page Every Page Has Rows Next Page Next 10 Pages

Select <input type="checkbox"/>	Date/Time	IP Address	User Name	Host Name/MAC	Upload Speed (KB/S)	Download Speed (KB/S)	Upload Size (KB)	Download Size (KB)
<input type="checkbox"/>	2009-09-30 00:06:33	192.168.0.4		F1	0.01	0.01	7.75	9.34
<input type="checkbox"/>	2009-09-30 00:06:33	192.168.0.5		08-00-27-16-B7-67	0.03	0.0	26.41	0.0
<input type="checkbox"/>	2009-09-30 00:06:33	192.168.0.6		08-00-27-67-0E-D4	0.03	0.0	25.67	0.0
<input type="checkbox"/>	2009-09-30 00:06:33	192.168.0.103		00-1E-68-C7-A3-62	0.0	0.01	2.93	12.46
<input type="checkbox"/>	2009-09-30 00:06:33	192.168.0.104		00-16-D4-4B-64-03	0.64	0.02	580.49	15.58
<input type="checkbox"/>	2009-09-30 00:06:33	192.168.0.110		00-0D-0B-DC-9F-91	0.0	0.0	0.29	0.18
<input type="checkbox"/>	2009-09-30 00:06:33	192.168.0.111		00-90-CC-DC-8E-1C	0.0	0.0	3.63	1.93
<input type="checkbox"/>	2009-09-30 00:06:33	192.168.0.111		00-90-CC-DC-8E-1C	0.0	0.0	0.35	0.54
<input type="checkbox"/>	2009-09-30 00:06:33	192.168.0.113		00-16-E6-DC-15-19	0.11	0.21	97.15	185.47
<input type="checkbox"/>	2009-09-30 00:06:33	192.168.0.116		00-22-B0-9F-3F-D1	0.0	0.0	0.07	0.06

- Search rule 1 Date/ Select the date/time range to lookup data.
- time:
- Search rule 2: Select the search filters below
 - IP address, username, computer name / MAC address
- Search: After specifying the search filter, click "Search" button to update the data list.
- E-mail: Each login account will come with a specific e-mail inbox (from "System and Authorization Management" => "User Management") that the e-mail function can send current page you are viewing in the PDF format.
- Delete: Put a checkmark in the box to the left of each entry in the list to set for deletion.
- PDF (only available on local installation version): If logging in from the PC with QnoSniff Professional installed, click on the "PDF" button to convert the page into a PDF file to be saved on another hard drive or directory.

Previous 10 pages:	Click this button to jump back 10 pages. For example, if you are at 201st data entry with 10 entries shown on each page, click on the "Previous 10 pages" button to jump to the page with the 101st data entry.
Previous page:	Go to the previous page on the list.
Next page:	Go to the next page on the list.
Next 10 pages:	Click this button to jump forward 10 pages. For example, if you are at 1st data entry with 10 entries shown on each page, click on the "Next 10 pages" button to jump to the page with the 101st data entry.
Go to page ___	Specify the number of entries shown on each page for 10, 30, 50, 100 entries; or use the pull down menu to directly jump to the page number to view.
Every page _ records	

Data list columns

All:	Put a checkmark in this box to select all entries on this page to be marked for deletion.
Date / time:	Time and date for the recorded action determined as P2P upload/download.
IP address:	Intranet IP address for the recorded action determined as P2P upload/download.
Username:	Intranet username for the recorded action determined as P2P upload/download.
Host name / MAC:	Intranet computer name or MAC address for the recorded action determined as P2P upload/download.
Upload speed (KB/S):	Average upload speed for the recorded action determined as P2P upload/download.
Download speed (KB/S):	Average download speed for the recorded action determined as P2P upload/download.
Uploaded size (KB):	Uploaded data size for the recorded action determined as P2P upload/download.
Downloaded size (KB):	Downloaded data size for the recorded action determined as P2P upload/download.

8.6 Telnet information

QnoSniff Professional supports the standard Telnet communication protocol. QnoSniff Professional currently does not support non-standard nor encrypted protocols, e.g. Telnet connection through other communication ports or SSH connections.

Telnet/BBS Information

Search Rule 1 Date from 2009-09-01 to 2009-10-19

Search Rule 2 IP Address

Search Rule 3 User Name

Search Mail Delete

Previous 10 Pages Previous Page goto 1 page every page has 10 rows Next Page Next 10 Pages

Select All	Data/Time	IP Address	User Name	Host Name/MAC	Server IP	Server Name	Telnet Account	Content
<input type="checkbox"/>	2009-09-29 23:52:16	192.168.2.88		00-19-DB-B6-30-62	140.112.172.11	140.112.172.11	Guest	Telnet
<input type="checkbox"/>	2009-09-29 23:52:27	192.168.0.129		USER	163.15.154.173	163.15.154.173	Guest	Telnet
<input type="checkbox"/>	2009-09-29 23:53:01	192.168.0.138		PC253163054224	163.15.154.173	163.15.154.173	Guest	Telnet
<input type="checkbox"/>	2009-09-29 23:55:08	192.168.1.155		AKEN-PC	140.112.172.11	140.112.172.11	Guest	Telnet
<input type="checkbox"/>	2009-09-29 23:55:39	192.168.2.58		00-23-F8-89-19-05	140.112.172.11	140.112.172.11	Guest	Telnet
<input type="checkbox"/>	2009-09-29 23:55:42	192.168.2.164		00-0A-E4-30-29-91	68.180.217.9	68.180.217.9	Guest	Telnet
<input type="checkbox"/>	2009-09-29 23:58:42	192.168.2.164		00-0A-E4-30-29-91	68.180.217.23	68.180.217.23	Guest	Telnet
<input type="checkbox"/>	2009-09-29 23:59:50	192.168.0.138		PC253163054224	163.15.154.173	163.15.154.173	Guest	Telnet

Search rule 1, Date/ time:

Select the date/time range to lookup data.

Search rule 2

Select the search filters below

Search rule 3:

IP address, username, computer name / MAC address, website
IP address, website name, Telnet account

Search:

After specifying the search filter, click "Search" button to update the data list.

E-mail:

Each login account will come with a specific e-mail inbox (from "System and Authorization Management" => "User Management") that the e-mail function can send current page you are viewing in the PDF format.

Delete:

Put a checkmark in the box to the left of each entry in the list to set for deletion.

PDF (only available on local installation version):

If logging in from the PC with QnoSniff Professional installed, click on the "PDF" button to convert the page into a PDF file to be saved on another hard drive or directory.

Previous 10 pages:

Click this button to jump back 10 pages. For example, if you are at 201st data entry with 10 entries shown on each page, click on the "Previous 10 pages" button to jump to the page with the 101st data entry.

Previous page:

Go to the previous page on the list.

Next page:

Go to the next page on the list.

Next 10 pages:

Click this button to jump forward 10 pages. For example, if you are at 1st data entry with 10 entries shown on each page, click on the "Next 10 pages" button to jump to the page with the 101st data entry.

Go to page _

Specify the number of entries shown on each page for 10, 30, 50, 100 entries; or use the pull down menu to directly jump to the page number you wish to view.

Every page _ records

Data list columns

All:

Put a checkmark in this box to select all entries on this page to be marked for deletion.

Date / time:

Time of Telnet record

IP address:

Intranet IP address for the specific Telnet record

Username:

Intranet username for the specific Telnet record

Host name / MAC:

Intranet computer name or MAC address for the specific Telnet record

Website IP address:

Destination IP address for the specific Telnet record

Address:

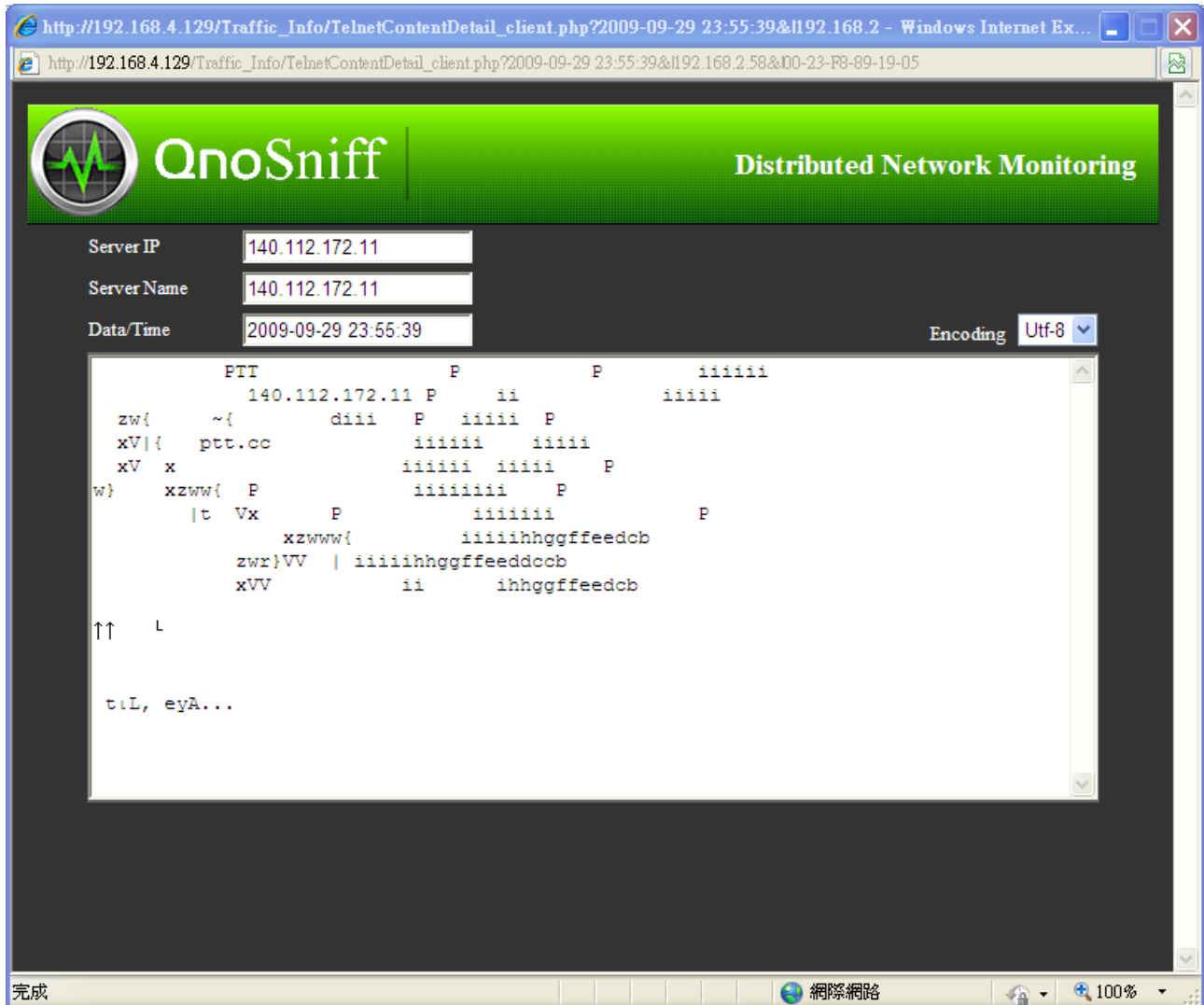
Destination address or domain name for the specific Telnet record

Telnet account:

Login account for the specific Telnet record

Content :

Detailed contents for the specific Telnet record; click this button to show the information below



Website IP address: Destination IP address for Telnet remote login

Address: Destination address or domain name for Telnet remote login

Date / time: Time and date for the Telnet login record

Content: Telnet login information

Encoding: Switch between Traditional Chinese, Simplified Chinese, and UTF-8

8.7 IM information

QnoSniff Professional supports the following applications for monitoring and logging:

[1] MSN (Live Message / 8.5 / 8.0)

[2] QQ (the user QQ account/password must be entered into "Basic Setup" => "Service Setup" => "IM: QQ number" to be able to monitor and log the chatting contents. However, not all "TM" versions of QQ can be monitored)

[3] Yahoo Message

[4] Google Talk

Instant Messenger Information

Search Rule 1 Date from 2009-09-01 to 2009-10-19

Search Rule 2 IP Address [input field] Search

Search Rule 3 User Name [input field] Mail Delete

Previous 10 Pages Previous Page goto 1 page every page has 10 rows Next Page Next 10 Pages

Select All	Data/Time	IP Address	User Name	Host Name/MAC	Local Account	Peer Account	IM Type	Record
<input type="checkbox"/>	2009-09-29 23:59:58	192.168.1.219		00-19-DB-CB-45-FD	wa_315a527	jill79212	YAHOO MSG	1
<input type="checkbox"/>	2009-09-29 23:59:58	192.168.2.123		LV-429AE77A94B0	snoop31836	bmwbmw41	YAHOO MSG	2
<input type="checkbox"/>	2009-09-29 23:59:59	192.168.2.95		00-1A-92-C9-06-DB	elliohuang	asd951411	YAHOO MSG	1
<input type="checkbox"/>	2009-09-30 00:00:16	192.168.1.159		00-16-E6-4B-4A-7C	show5717082	lovelove8086	YAHOO MSG	1
<input type="checkbox"/>	2009-09-30 00:00:45	192.168.0.232		NKMU-7024BA1D02	vivng342001@hotmail.com	machel75_7_2@hotmail.com	MSN	2
<input type="checkbox"/>	2009-09-30 00:00:46	192.168.2.58		00-23-F8-89-19-05	pink02@hotmail.com	s911003@mail.yzu.edu.tw	MSN	3
<input type="checkbox"/>	2009-09-30 00:01:01	192.168.0.121		MYCHAT-556D79AD	aneg10518	peter90132	YAHOO MSG	10
<input type="checkbox"/>	2009-09-30 00:01:17	192.168.1.219		00-19-DB-CB-45-FD	wa_315a527	e2000_618	YAHOO MSG	10
<input type="checkbox"/>	2009-09-30 00:02:20	192.168.0.110		00-0D-0B-DC-9F-91	jung940002@hotmail.com	like5399@hotmail.com	MSN	15
<input type="checkbox"/>	2009-09-30 00:03:50	192.168.0.249		00-1A-93-92-EE-55	utada_hikara@hotmail.com	ohva708@hotmail.com	MSN	4

Search rule 1 Date/ Select the date/time range to lookup data.
time:

Search rule 2 Select the search filters below

Search rule 3: IP address, username, computer name / MAC address,user
account, peer account, IM type

Search:	After specifying the search filter, click "Search" button to update the data list.
E-mail:	Each login account will come with a specific e-mail inbox (from "System and Authorization Management" => "User Management") that the e-mail function can send current page you are viewing in the PDF format.
Delete:	Put a checkmark in the box to the left of each entry in the list to set for deletion.
PDF (only available on local installation version):	If logging in from the PC with QnoSniff Professional installed, click on the "PDF" button to convert the page into a PDF file to be saved on another hard drive or directory.
Previous 10 pages:	Click this button to jump back 10 pages. For example, if you are at 201st data entry with 10 entries shown on each page, click on the "Previous 10 pages" button to jump to the page with the 101st data entry.
Previous page:	Go to the previous page on the list.
Next page:	Go to the next page on the list.
Next 10 pages:	Click this button to jump forward 10 pages. For example, if you are at 1st data entry with 10 entries shown on each page, click on the "Next 10 pages" button to jump to the page with the 101st data entry.
Go to page _	Specify the number of entries shown on each page for 10, 30, 50, 100 entries; or use the pull down menu to directly jump to the page number you wish to view.
Every page _ records	

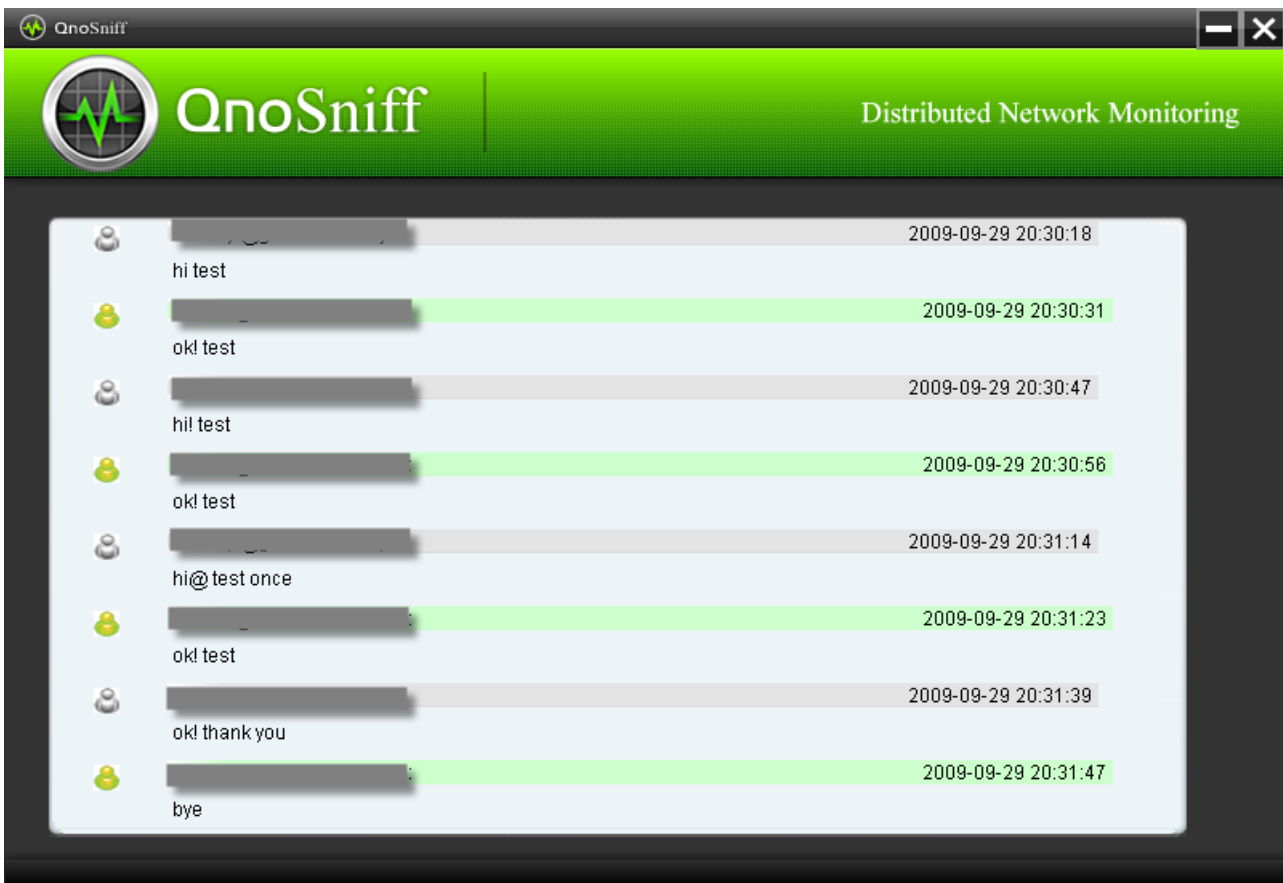
Data list columns

Select All:	Put a checkmark in this box to select all entries on this page to be marked for deletion.
Date / time:	Timestamp of the specific IM conversation
IP address:	Intranet IP address for the specific IM conversation
Username:	Username for the specific IM conversation
Host name / MAC:	Computer name for the specific IM conversation
Local Account:	User account on the IP / computer listed above for the specific IM conversation

Peer account: The peer account for the specific IM conversation

IM type: IM type of either MSN, QQ, YahooMessage, or Google Talk.

Record: The total number of messages to/from for the specific IM conversation. Click on the number hyperlink and the detailed IM conversation will popup (as shown below).



* The account info will be shown in the grayed out portion in the example above.

The data can be sorted by the individual columns of date/time, IP address, username, host name / MAC address, IM type, or logs.

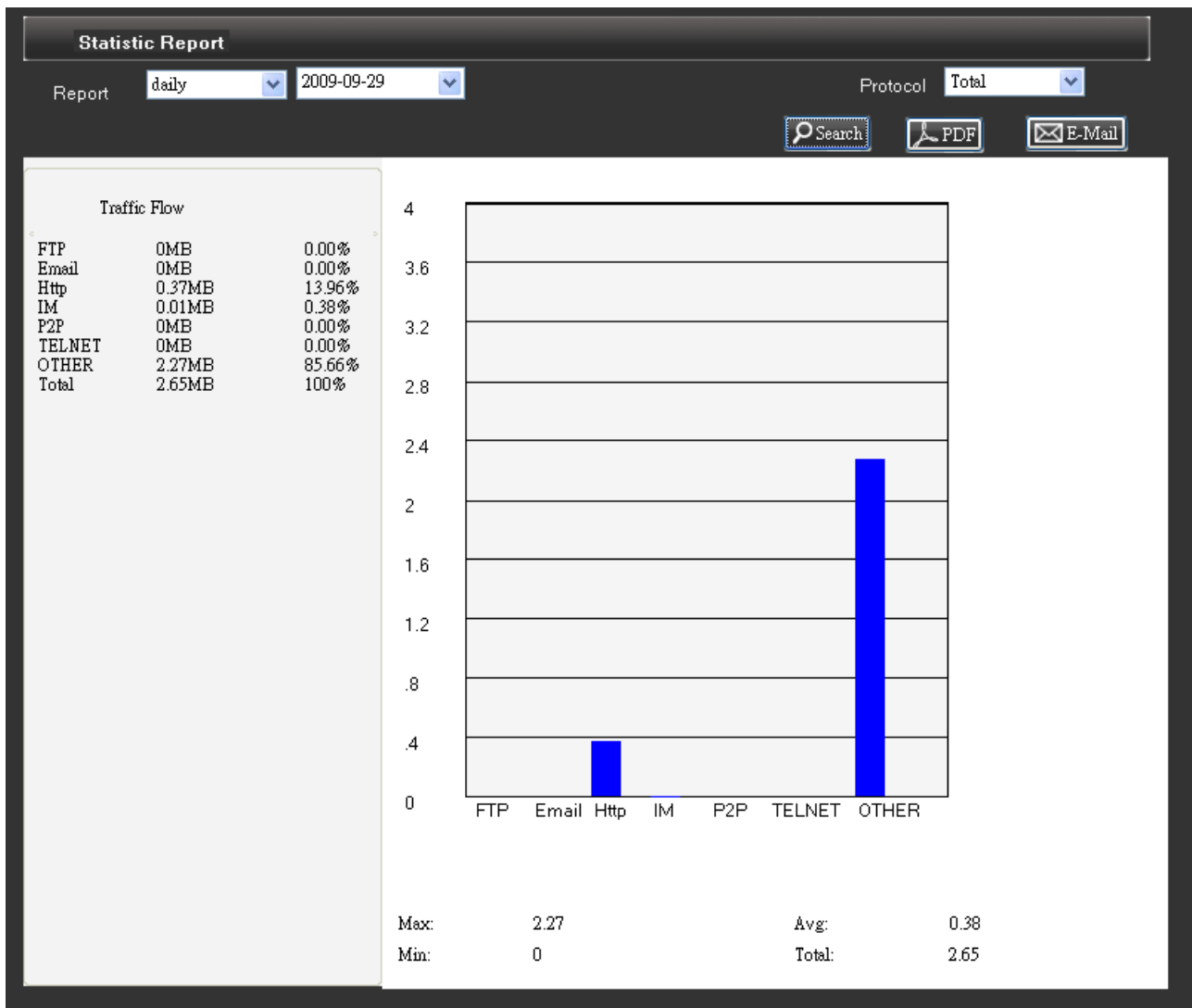
IX. Statistics

This chapter includes the traffic statistics function supported by QnoSniff Professional, including traffic report, department traffic ranking list, user traffic ranking list. The intranet user and application data can be presented by department, communication protocol, and within a custom time period. The bandwidth report and charts will be updated every 15 minutes with new statistics data, and will not change within the 15-minute period.

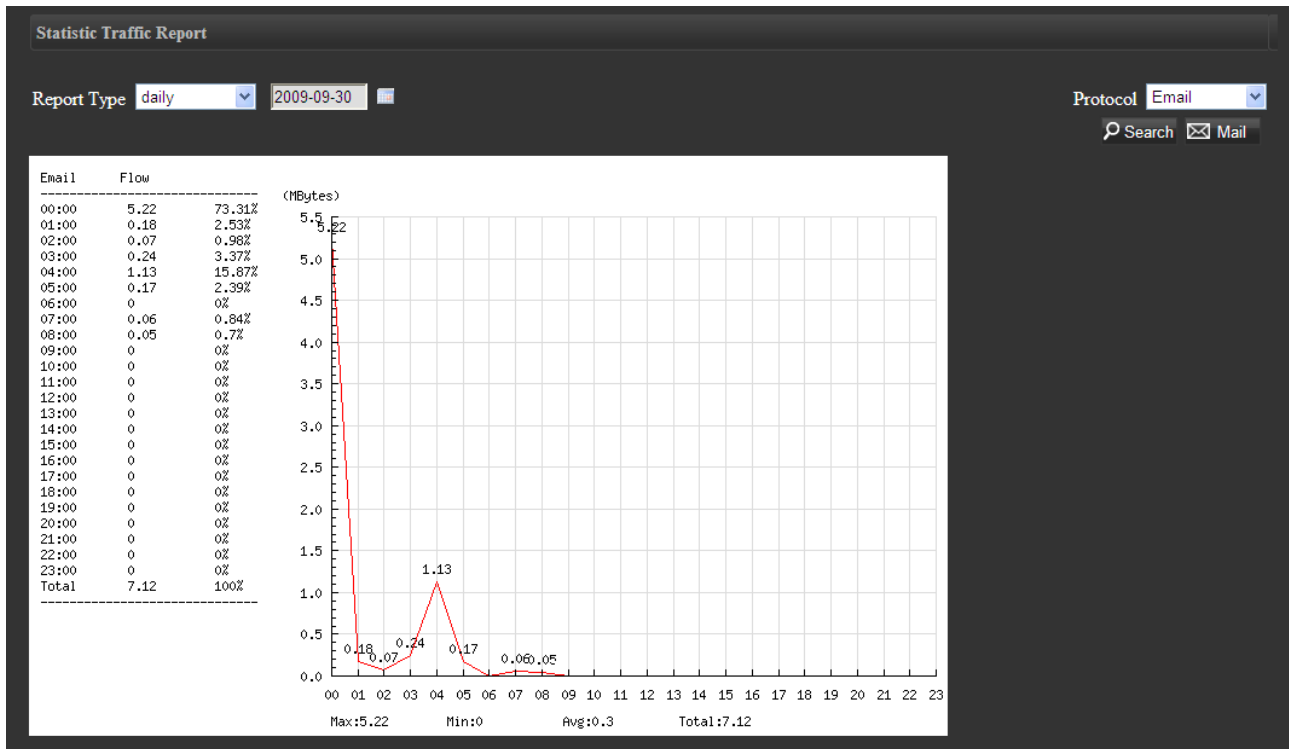
9.1 Statistic report

This report includes the statistical data and charts for traffic data of various communication protocols.

From the "Traffic Flow" list at the left, select "Total" to show the statistics and percentage from total traffic flow for each individual communication protocol within the specified time period. The icon is displayed at the right hand side. After selecting the time period and the communication protocol, click on the "Search" button to update the information.



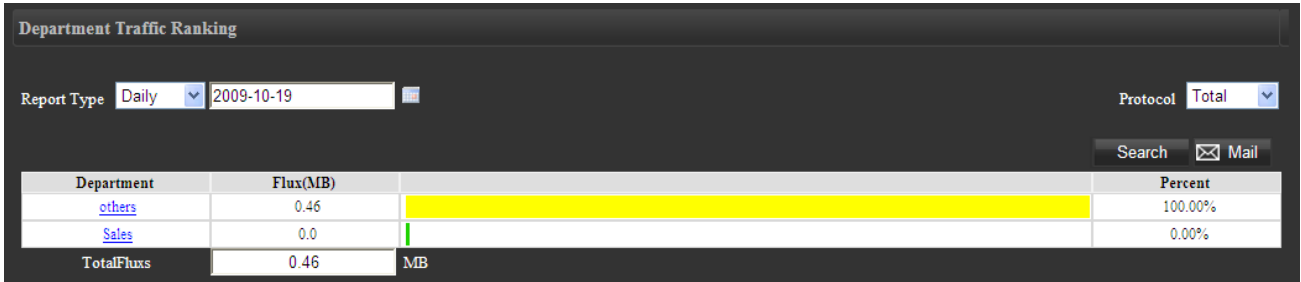
If the single communication protocol is selected (e.g. e-mail) instead of "Total", the traffic flow list at the left will change into the x-y chart with traffic flow vs. each time period. If daily report is selected, the chart is presented in 1-hour increments between 0-23 hours; if weekly report is selected, the chart is presented in 6-hour increments up to 7 days; if monthly report is selected, the chart is presented in daily increments from 1st to 30th or 31st.



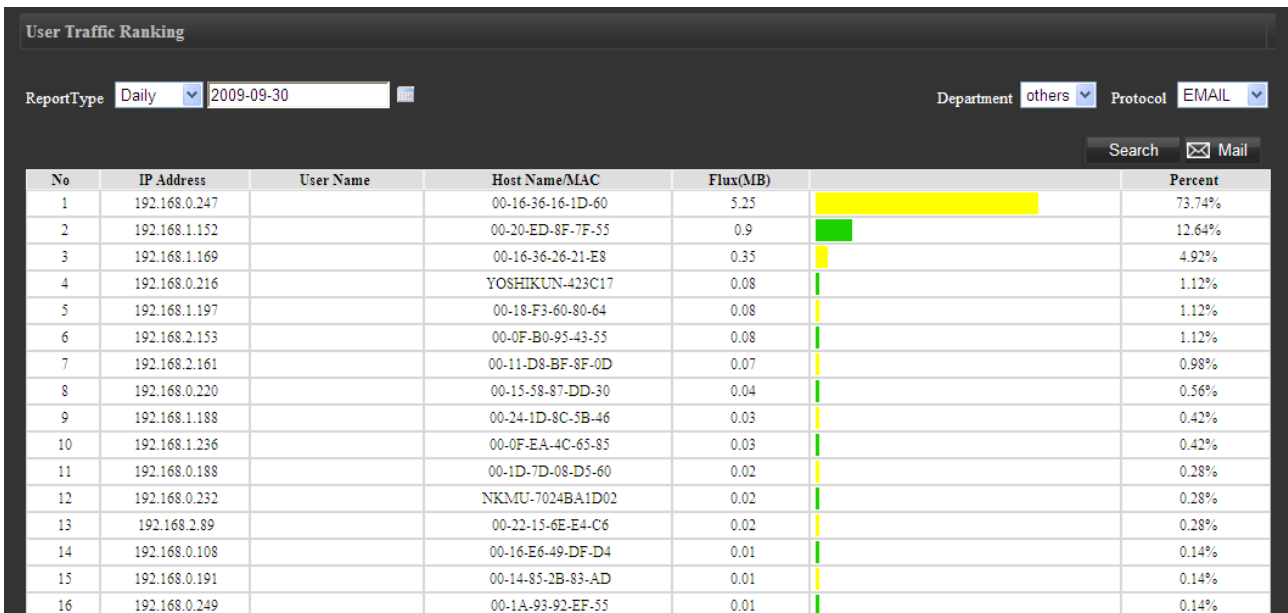
E-mail, PDF (only available on local installation version) functions are applicable to the traffic flow statistic lists for direct conversion of the report/chart into PDF file, or directly e-mailing the PDF file to the administrator.

9.2 Department ranking

The traffic by departments is mainly sorted by traffic flow and communication protocol, for example, instant messaging traffic for all departments ranking from highest to lowest.



You can specify the time period, communication protocol types to display the traffic statistics for all departments. To view the detailed traffic data for all users under the department for a specific communication protocol, click on the hyperlink for the department name (e.g. Sales) to show all users. Specify the communication protocol (e.g. E-mail) to show the traffic ranking, volume, and percentage etc. (as below).



9.3 User ranking

User ranking is sorted by traffic flow for intranet users. You can also choose time period, department, and communication protocol to view different user ranking.

User Traffic Ranking

ReportType: Daily | 2009-09-30 | Department: Total | Protocol: Total

Search Mail

No	IP Address	User Name	Host Name/MAC	Flux(MB)		Percent
1	192.168.2.87		00-1C-25-3C-0F-02	6971.38	<div style="width: 22.17%; height: 10px; background-color: yellow;"></div>	22.17%
2	192.168.2.121		00-1E-68-BD-75-F6	2448.11	<div style="width: 7.79%; height: 10px; background-color: green;"></div>	7.79%
3	192.168.2.84		00-23-54-42-32-1E	2421.66	<div style="width: 7.70%; height: 10px; background-color: yellow;"></div>	7.70%
4	192.168.0.158		00-24-1D-64-56-09	1172.45	<div style="width: 3.73%; height: 10px; background-color: green;"></div>	3.73%
5	192.168.2.74		00-1A-4D-8B-37-5F	855.39	<div style="width: 2.72%; height: 10px; background-color: yellow;"></div>	2.72%
6	192.168.0.145		TEST-3AA7748DFB	847.39	<div style="width: 2.70%; height: 10px; background-color: green;"></div>	2.70%
7	192.168.1.8		00-1F-D0-86-CF-CB	723.98	<div style="width: 2.30%; height: 10px; background-color: yellow;"></div>	2.30%
8	192.168.1.194		00-21-85-38-5B-A1	666.62	<div style="width: 2.12%; height: 10px; background-color: green;"></div>	2.12%
9	192.168.1.159		00-16-E6-4B-4A-7C	587.99	<div style="width: 1.87%; height: 10px; background-color: yellow;"></div>	1.87%
10	192.168.1.80		HOLLINGS-8D5E04	529.55	<div style="width: 1.68%; height: 10px; background-color: green;"></div>	1.68%
11	192.168.1.32		FU-PC	456.72	<div style="width: 1.45%; height: 10px; background-color: yellow;"></div>	1.45%
12	192.168.2.151		ANGEL-ACEC62065	397.19	<div style="width: 1.26%; height: 10px; background-color: green;"></div>	1.26%
13	192.168.1.169		00-16-36-26-21-E8	367.47	<div style="width: 1.17%; height: 10px; background-color: yellow;"></div>	1.17%
14	192.168.1.178		00-24-81-6B-1E-31	357.77	<div style="width: 1.14%; height: 10px; background-color: green;"></div>	1.14%
15	192.168.1.185		00-16-D4-4B-46-70	349.4	<div style="width: 1.11%; height: 10px; background-color: yellow;"></div>	1.11%
16	192.168.0.115		00-24-8C-52-81-DF	341.4	<div style="width: 1.09%; height: 10px; background-color: green;"></div>	1.09%

Access to the page for the first time will rank the traffic by users and for all communication protocols, including the actual traffic flow (MB) and the percentage. To view another selection or another communication protocol, use the pull down menu at the right to filter the results. Please remember to click the "Start Analysis" button to update the results with the new search filter.

X. Logout

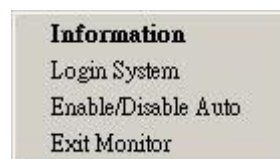
After using QnoSniff Professional, click "Logout" menu to quit the control panel main page.

Logging out from a remote session will quit the web page. However, logging out from the PC with QnoSniff Professional local installation version will quit from the control panel main page, while the QnoSniff Professional icon will still be running in the system tray at the lower right corner. QnoSniff Professional is running in the background gathering data (green icon indicates connected to the router, gray icon indicates disconnection with the router).

To completely shut down QnoSniff Professional including the data gathering function, right click on the system tray icon and select "Exit Monitor" from the context menu. QnoSniff Professional will ask again if you wish to shut down the entire QnoSniff Professional program, click OK and the shut down procedure will begin. The system tray icon will go away after 10-15 seconds and the QnoSniff Professional program is terminated.

Please note: If QnoSniff Professional is completely shut down including the data gathering function, no data will be accumulated during this time. QnoSniff Professional database will also not have any data, and therefore the statistic data will not be available for during this time period.

Right click on the system tray icon to show the context menu:



1. Information: QnoSniff Professional copyright info, NIC being monitored, QnoSniff Professional software version, and the current storage data size.
2. Login System: Click on this to successfully login to QnoSniff Professional control panel.
3. Enable/Disable Auto: Enable or disable automatic launch of QnoSniff Professional in the background with system boot up. If this option is enabled for the first time, QnoSniff Professional will automatically launch at the next system restart.
4. Exit Monitor: Quit and completely shut down QnoSniff Professional including the data gathering function.

QnoSniff Professional will ask again if you wish to shut down the entire QnoSniff Professional program, click OK and the shut down procedure will begin. The system tray icon will go away after 10-15 seconds and the QnoSniff Professional program is terminated.



XI. Uninstall QnoSniff Professional

To uninstall QnoSniff Professional, go to "Programs" and find the QnoSniff directory. Click on "Uninstall"

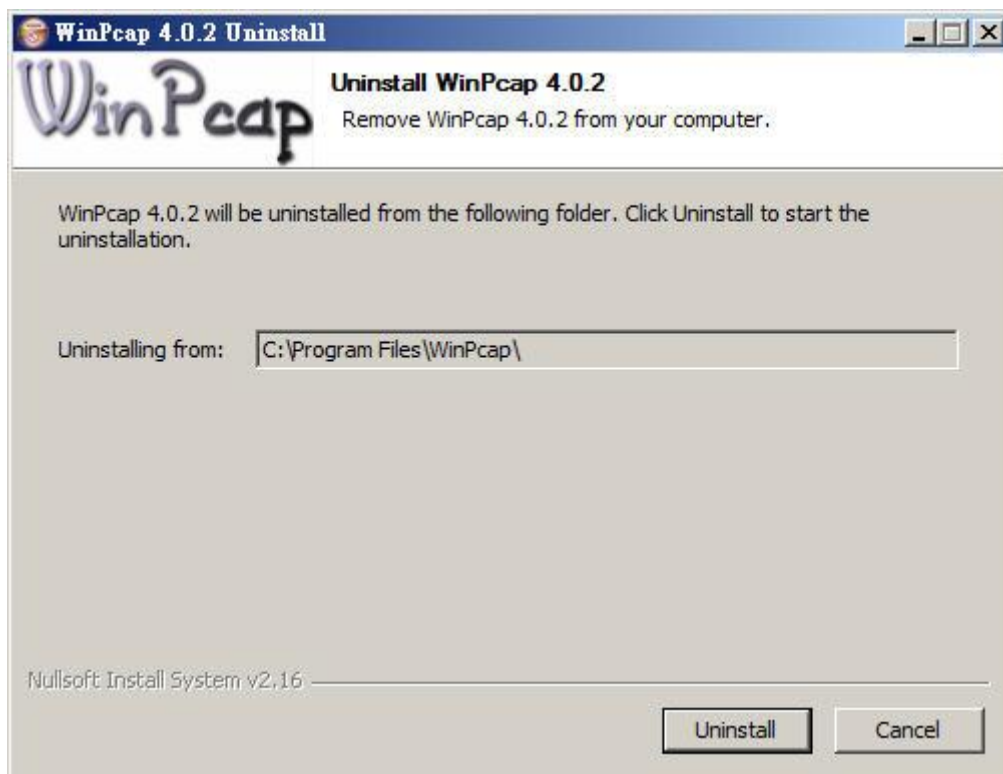
under the directory as shown to the right



to begin the uninstall procedure. Alternatively, go

to "Control Panel" => "Add/remove Programs" and select QnoSniff to initiate the uninstall shield.

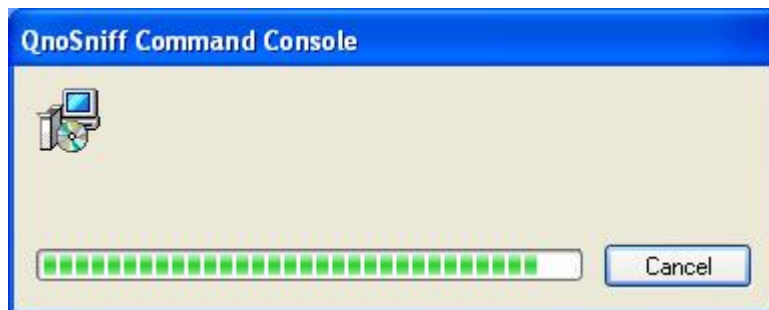
WinPcap will first be uninstalled as shown below. This step might be skipped if uninstalling from the Control Panel, but the components will be fully uninstalled using both methods.



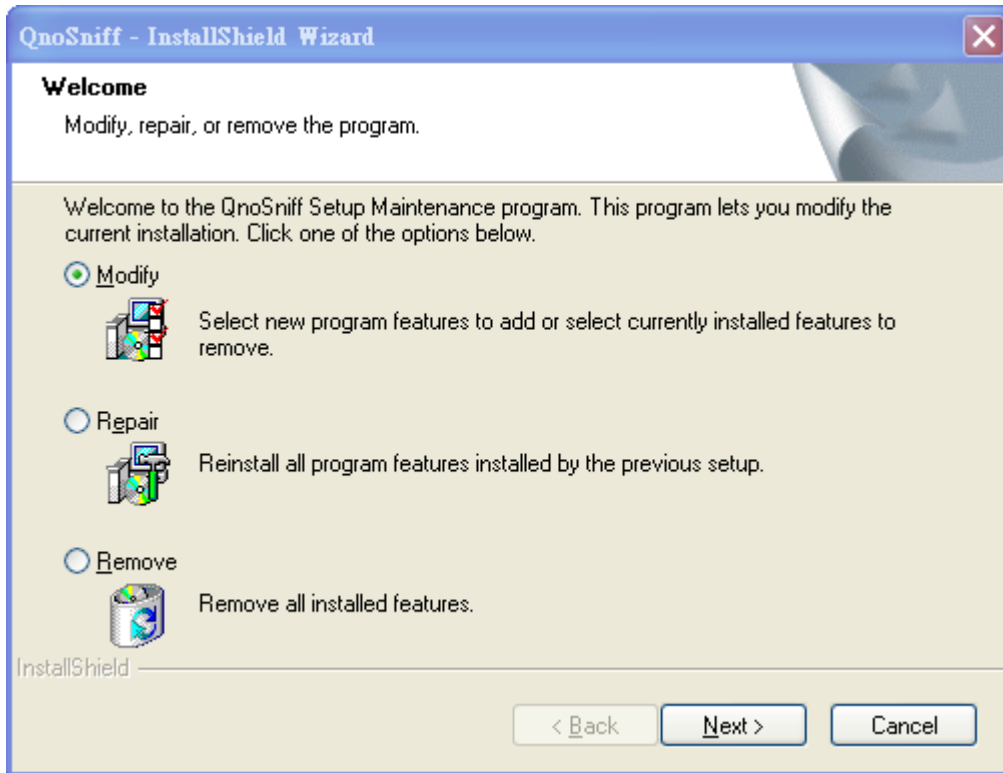
Click "Uninstall" to uninstall the WinPcap component and the completed screen is as below. Click "Finish" to continue with uninstall and the popup window will ask if you wish to uninstall the main program. Click "Yes" to continue.



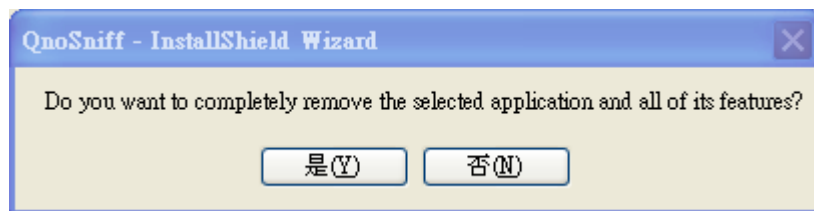
Collecting information for uninstallation process



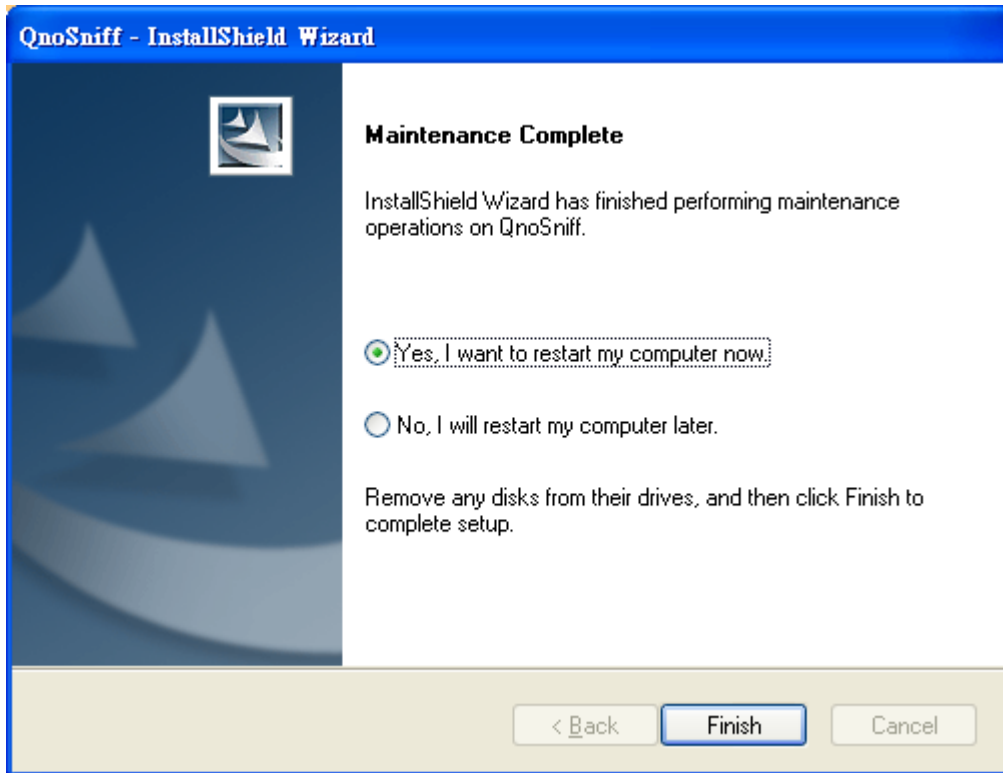
The software maintenance screen will popup as below; please select the "Remove (R)" option and click "Next".



Click "Yes" to confirm and begin the uninstall process for the main program.



After the uninstall process is finished, the popup window will ask if you want to restart the system. If there are other incomplete tasks that are not saved, you can choose to restart later. Or the system can be restarted immediately if there are no other concerns. Please note that the uninstall procedure will be complete after the system has restarted.



After the system has restarted, please locate the previous install path for QnoSniff Professional (e.g.

C:\QnoSniff  QnoSniff) to view the database files saved in the directory, as shown below.



If QnoSniff Professional is reinstalled at a later time to the same directory path, these database files can still be linked to the QnoSniff Professional control panel for viewing and filtered search. If the database files are no longer needed, the entire QnoSniff directory can be deleted to free up available hard drive space.