NETASQ REALTIME MONITOR V.9.0

USER MANUAL

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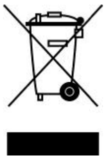

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1. INTRODUCTION

1.1. BASIC PRINCIPLES

1.1.1. Who should read this user guide?

This manual is intended for network administrators or for users with the minimum knowledge of IP.
In order to configure your NETASQ Firewall in the most efficient manner, you must be familiar with these protocols and their specific features:

- ICMP (Internet Control Message Protocol).
- IP (Internet Protocol).
- TCP (Transmission Control Protocol).
- UDP (User Datagram Protocol).

Knowledge of the general operation of the major TCP/IP services is also preferable:

- HTTP
- FTP
- Mail systems (SMTP, POP3, IMAP).
- Telnet
- DNS
- DHCP
- SNMP
- NTP

If you do not possess this knowledge, don't worry: any general book on TCP/IP can provide you with the required elements.
The better your knowledge of TCP/IP, the more efficient will be your filter rules and the greater your IP security.

1.1.2. Typographical conventions

1.1.2.1. Abbreviations

For the sake of clarity, the usual abbreviations have been kept. For example, **VPN** (*Virtual Private Network*). Other acronyms will be defined in the ***Glossary***.

1.1.2.2. Display

Names of windows, menus, sub-menus, buttons and options in the application will be represented in the following fonts:

I

Menu **Vulnerability Manager**

n

d

1.1.2.3. Indications

Indications in this manual provide important information and are intended to attract your attention. Among these, you will find:

NOTE/REMARKS

These messages provide a more detailed explanation on a particular point.

WARNING

These messages warn you about the risks involved in performing a certain manipulation or about how not to use your firewall.

TIP

This message gives you ingenious ideas on using the options on your product.

DEFINITION

Describes technical terms relating to NETASQ or networking. These terms will also be covered in the glossary.

1.1.2.4. Messages

Messages that appear in the application are indicated in double quotes.

Example: "Delete this entry?"

1.1.2.5. Examples

Example

This allows you to have an example of a procedure explained earlier.

1.1.2.6. Command lines

Command lines

```
Indicates a command line (for example, an entry in the DOS command window).
```

1.1.2.7. Reminders

Reminders are indicated as follows:

- Reminder.

1.1.2.8. Access to features

Access paths to features are indicated as follows:

➲ Access the menu **`File\Application settings.`**

1.1.3. Vocabulary used in this manual

Dialup	Interface on which the modem is connected.
Firewall	NETASQ product to protect and filter your data.
Logs	Records of user activity on the network.

1.1.4. Getting help

To obtain help regarding your product and the different applications in it:

- Website: ***www.netasq.com***. Your secure-access area allows you to access a wide range of documentation and other information.
- User manuals: **NETASQ UNIFIED MANAGER, NETASQ REAL-TIME** and **NETASQ EVENT REPORTER.**

1.1.5. Introduction to NETASQ REALTIME MONITOR

NETASQ REAL-TIME MONITOR allows you to visualize your Firewall's activity in real time and provides the information below:

- Use of the Firewall's internal resources (memory, CPU, etc.),
- List of raised alarms when vulnerabilities are detected
- List of connected hosts and users,
- Real-time alarms,
- Number of connections, bandwidth use, throughput,
- Information on the status of interfaces and VPN tunnels,
- Last logs generated,
- Use of disk space allocated to logs.

With this tool, you can connect to several Firewalls and supervise all of them.

NETASQ REAL-TIME MONITOR provides a simple display of connections transiting via the Firewall, along with any alarms it has generated.

Monitor can be shut down by clicking on the cross in the top right corner, but this does not stop it from operating. Clicking on the Monitor icon in the taskbar restores it.
By default, Monitor can only be run on a machine connected to the internal network and must be running permanently in order to avoid missing any alarms. You can use it remotely (through the internet) but you would have to explicitly authorize the service (Firewall_srv) in the filter rules.

1.2. CONNECTION

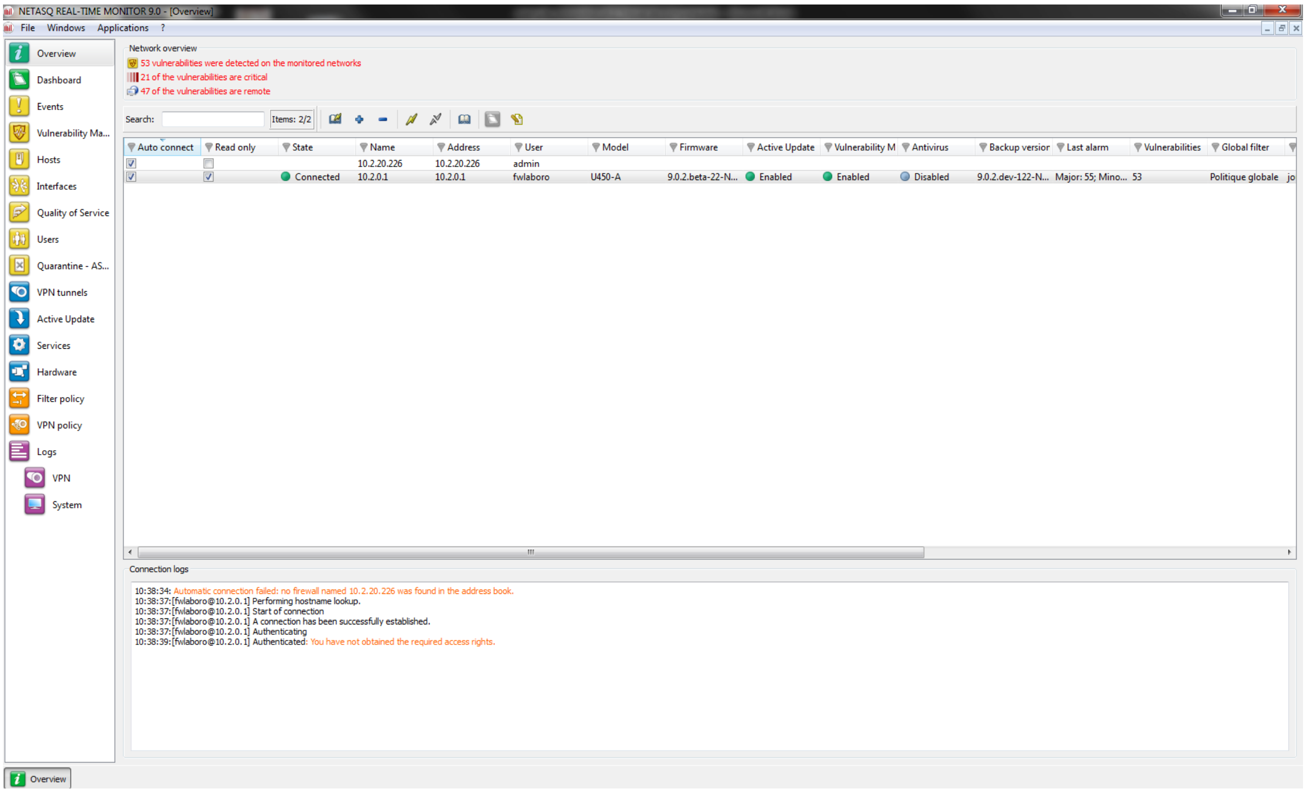
1.2.1. Access

There are 2 ways to launch the **NETASQ REAL-TIME MONITOR** application:

- Via the shortcut **`Applications\Launch the NETASQ REAL-TIME-MONITOR`** in the menu bar on other applications in the Administration Suite.
- Via the menu **`Start\Programs\NETASQ\Administration Suite 9.0\NETASQ REAL-TIME MONITOR.`**

If this is your very first time connecting to your product, a message will prompt you to confirm the serial number (found on the underside of the firewall).

The **`Overview`** window will open upon connection:



53 vulnerabilities were detected on the monitored networks
21 of the vulnerabilities are critical
47 of the vulnerabilities are remote

Auto connect	Read only	State	Name	Address	User	Model	Firmware	Active Update	Vulnerability M	Antivirus	Backup versior	Last alarm	Vulnerabilities	Global filter	
☑	☐		10.2.20.226	10.2.20.226	admin										
☑	☑	● Connected	10.2.0.1	10.2.0.1	fwlaboro	U450-A	9.0.2.beta-22-N...	● Enabled	● Enabled	● Disabled	9.0.2.dev-122-N...	Major: 55; Mino...	53	Politique globale	jo

```
10:38:34: Automatic connection failed: no firewall named 10.2.20.226 was found in the address book.
10:38:37:[fwlaboro@10.2.0.1] Performing hostname lookup.
10:38:37:[fwlaboro@10.2.0.1] Start of connection
10:38:37:[fwlaboro@10.2.0.1] A connection has been successfully established.
10:38:37:[fwlaboro@10.2.0.1] Authenticating
10:38:39:[fwlaboro@10.2.0.1] Authenticated: You have not obtained the required access rights.
```

Figure 1: Overview

1.2.2. Connection

NETASQ REAL-TIME MONITOR is opened differently depending on the option chosen in the tab `Startup behavior` in `Application settings` (cf. *Part 2/Chapter 3: Startup behavior).*

The possible options are:

- Direct connection
- Connect to automatic connection data sources
- None

1.2.2.1. Direct connection to a NETASQ multifonction Firewall

Direct connection allows you to enter connection information for a specific firewall.

To make a direct connection, go to the menu `File\Direct connection.` Or, if Monitor has been configured to connect directly at startup, the following window will appear:

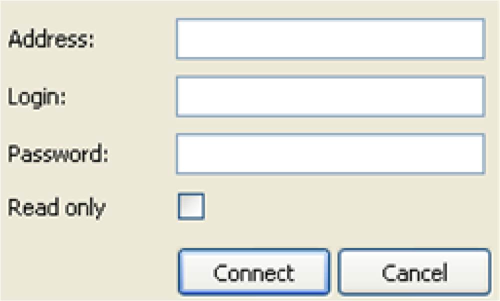


Figure 2: Direct connection

NOTE

For more information regarding connection, please refer to ***Part 2/Chapter3: Startup behavior***.

1 Indicate the firewall's IP address in the **Address** field.

2 Enter the administrator login in the **User** field.

3 Enter the administrator password in the **Password** field.

REMARK

Select the option `Read only` to connect to the firewall in read-only mode.

4 Click on the **Connect** button. The main window will appear.

1.2.2.2. Opening the address book

Go to the menu `File\Address book` to open the address book. Or, if Monitor has been configured to open the address book at startup, the Address book window will appear:

NOTE

For more information regarding the address book, please refer to ***Part1/Chapter2: Address book.***

1.2.2.3. Connecting automatically to the data source

If this option has been selected in **`Startup behavior\Application settings`**, Monitor will directly open the "Overview" main window and the application will automatically connect to the existing firewalls. (*cf. for more information regarding connection, please refer to the section **Part 2/Chapter 3: Startup behavior***.)

1.2.2.4. None

If this option has been selected in **`Startup behavior\ Application settings`**, Monitor will directly open the "Overview" main window but no application will be connected to the firewall. Only the **`Overview`** menu will be enabled. The other menus in the directory will be grayed out. (*cf. for more information regarding connection, please refer to **Part 2/Chapter 3: Startup behavior**.)*

1.2.3. Address book

The address book can be accessed from the menu **`File\Address book.`**

REMARK

The address book can also be opened automatically upon the startup of the application if you have selected the option in **`Application settings/Behaviour at start up.`** (*See **Part 2/Chapter 3: Behaviour at start up***).

It is possible to store connection data on your different Firewalls. This information is stored on the same client workstation on which the interface has been installed. It may be encrypted if you check the option **`Address book is encrypted`**. In this case, you will be asked to enter an encryption key. The information that is stored for each firewall includes the IP address, login name, connection password and the serial number of the Firewall to which you wish to connect. This password belongs to an authorized user.

By specifying a serial number, you will protect yourself from “man-in-the-middle” attacks. If you attempt a connection on an firewall that does not meet the “serial number” criterion indicated in the address book, the monitor will inform you that you are attempting to connect to an unknown firewall. You will also be asked if you wish to add this serial number to the list of authorized firewalls. Verify the information displayed in the monitor before accepting such a request.

Once this information has been entered, you may save it using the **Save** button. To open a session on one of the Firewalls from the address book, click on its name then on the **OK** button, or simply double click on the name of the Firewall.

WARNING

If you modify the **`Address book is encrypted`** option, the address book has to be saved once more to apply the changes

Check the option **Display passwords** to check the passwords used for each Firewall saved in the address book (passwords are displayed in plaintext).

1.2.3.1. Adding an address

Click on the **Add** button to add an address to the address book. Other information to supply:

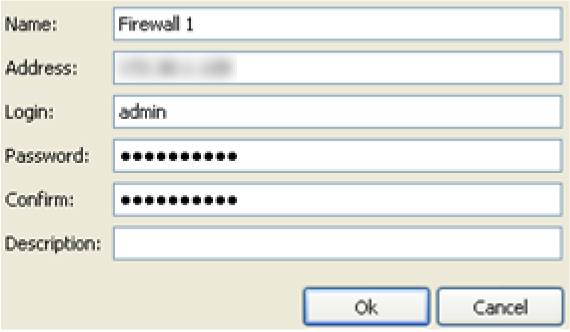
Name	The name of the firewall
Address	IP address of the firewall
Login	The administrator account.
Password	Administrator password
Confirm	Confirms the password
Description	Description or comments regarding the firewall.

1.2.3.2. Modifying an address

The procedure for modifying an address in the address book is as follows:

1 Select the firewall to be modified.

2 Click on the **Modify** button. The following window will appear:



Name: Firewall 1
Address: [redacted]
Login: admin
Password: ●●●●●●●●●●●
Confirm: ●●●●●●●●●●●
Description:

Figure 3: Modifying an address

3 Make the necessary changes.

4 Click on **OK** to confirm changes.

1.2.3.3. Deleting an address

The procedure for deleting a firewall from the address book is as follows:

1 Select the firewall to delete.

2 Click on the **Delete** button. The following message will appear:

"Confirm deletion of these items?"

3 Click on **Yes** or **No** to confirm deletion or cancel.

1.2.3.4. Importing an address book

The procedure for importing an existing address book is as follows:

1 Click on the **Import** button. The following window will appear:

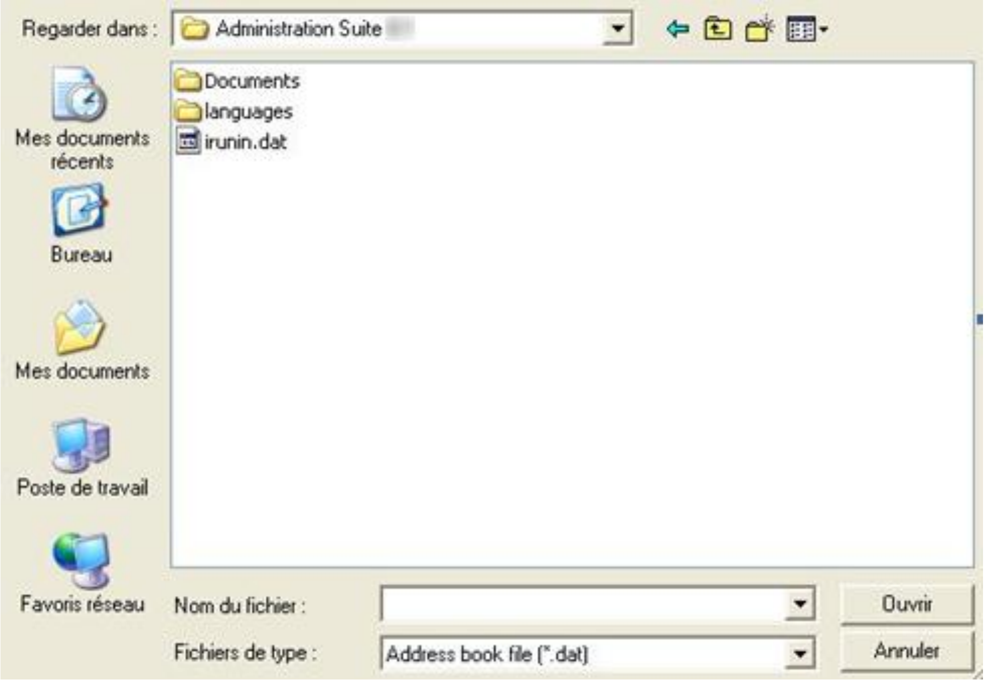


Figure 4: Importing the address book

2 Select the file to import.

REMARK

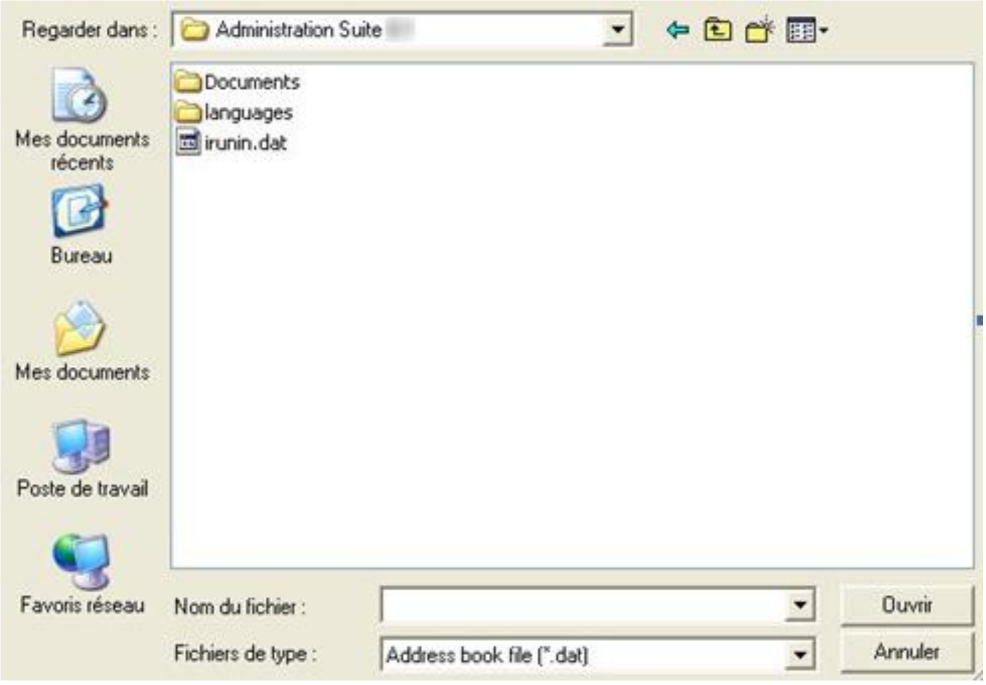
The file to import should be in **.dat** format.

3 Click on **Open**.

1.2.3.5. Exporting an address book

The procedure for exporting an existing address book is as follows:

1 Click on **Export**. The following window will appear:



Regarder dans : Administration Suite

Fichiers de type : Address book file (*.dat)

Figure 5: Exporting the address book

2 Select the file to export.

REMARK

The file to export should be in **.dat** format.

3 Click on **Save**.

1.2.3.6. Search

The search covers all information found in the columns.

Information can be filtered on a column and the search can then be refined.

Examples:

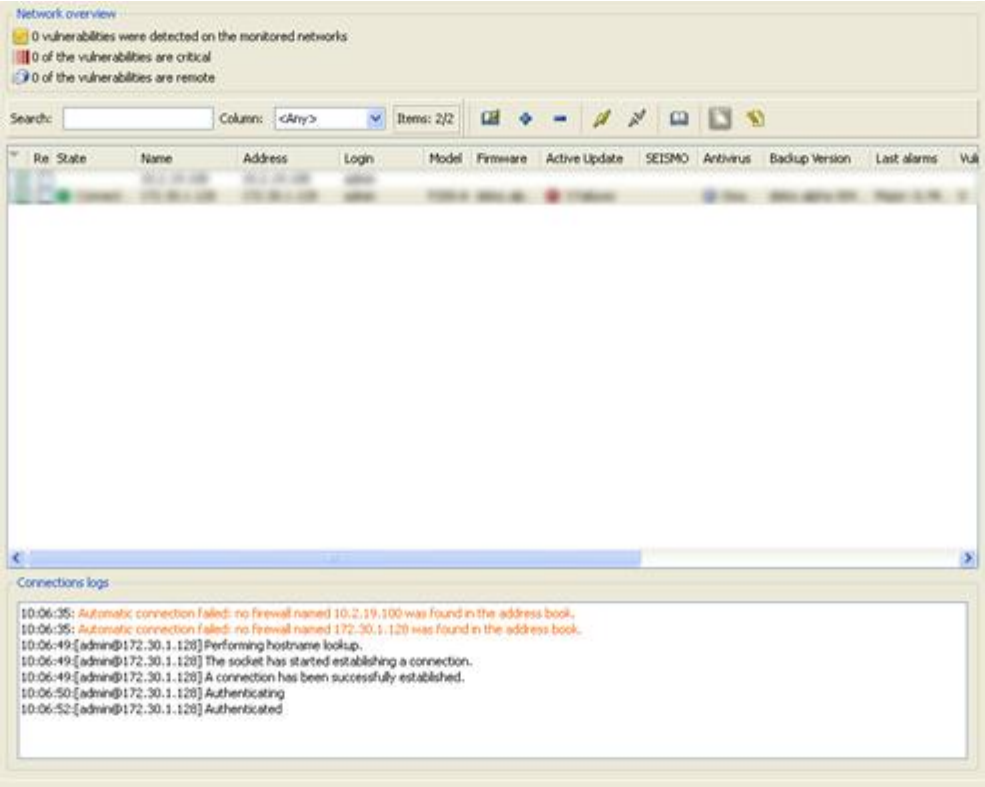
- Filter on the “Address” column containing 129: a list of results will appear; next, launch a global search by refining according to address.
- Filter on the “Address” column beginning with “10.2”, then search from the displayed addresses, hosts with addresses beginning with “10.2.14” by entering only “14” in the search field.

2. GETTING FAMILIAR WITH NETASQ REAL-TIME MONITOR

2.1. PRESENTATION OF THE INTERFACE

2.1.1. Main window

From this window, you can open several windows, each connected to different firewalls.



Network overview

0 vulnerabilities were detected on the monitored networks

0 of the vulnerabilities are critical

0 of the vulnerabilities are remote

```
10:06:35: Automatic connection failed: no firewall named 10.2.19.100 was found in the address book.
10:06:35: Automatic connection failed: no firewall named 172.30.1.120 was found in the address book.
10:06:49:[admin@172.30.1.128] Performing hostname lookup.
10:06:49:[admin@172.30.1.128] The socket has started establishing a connection.
10:06:49:[admin@172.30.1.128] A connection has been successfully established.
10:06:50:[admin@172.30.1.128] Authenticating
10:06:52:[admin@172.30.1.128] Authenticated
```

Figure 6: Overview

Once Monitor is connected, it will open a welcome window (`Overview` Menu) which will display various types of information on the firewall's activity.

It consists of five parts:

- A menu bar
- A horizontal bar containing icons relating to connection and a search zone
- A vertical bar containing a menu directory allowing **NETASQ REAL-TIME MONITOR** options to be viewed and configured
- A result display zone
- A status bar

REMARK

The other windows in the menu directory may contain the following buttons:

- Refresh
- Show/Hide help
- Firewall
- Duplicate

2.1.2. Description of icon

	Connects via the address book.
✚	Connects to a firewall
➖	Disconnects or deletes a connection.
	Connects to the selected firewall.
	Disconnects from the selected firewall.
	Edits the address book address book.
	Displays the dashboard of the selected firewall.
	Memory. List of connected hosts (IP address, interface to which the user is connected, amount of data transferred, number of connections, throughput used...). List of authenticated users (user name, IP, remaining time on authentication period...). List of alarms raised (major and minor). List of active VPN tunnels. List of active services. Status of the Active Update module. Statistics. Vulnerability Manager…

2.1.3. Menus

The main window contains the following menus: **`File`**, **`Windows`**, **`Applications`**, and **`? (Help)`**.

File	Allows you to connect to Firewalls and to access the application's general options.
Windows	Allows you to organize the connection windows on the screen.
Applications	Enables you to execute the two other applications making up the NETASQ Administration Suite: **NETASQ UNIFIED MANAGER** et **NETASQ EVENT REPORTER**.
? (Help)	Allows you to access the relevant Help file, and to know which version the monitor runs on.

2.1.4. Menu directory

Overview	This window lists the firewalls. Monitor opens in this window once the connection has been established... The Console sub-menu: When the option **Enable** is selected in the menu **`Application parameters\Miscellaneous`** in the console zone, you will be able to access firewalls in console mode (CLI commands). When this window is validated, a `Console` menu will be added under the `Overview` menu directory.
Dashboard	This window gives you a summary of the main information relating to your product's activity.
Events	This window lists events that the firewall has raised.
Vulnerability Manager	This window allows you to view alarms being raised and to get help in the event of vulnerability.
Hosts	List of hosts on your network.
Interfaces	This window allows you to get statistics on bandwidth, connections and throughput.
Quality of service	This window allows you to analyze your bandwidth, connections and throughput.
Users	This window allows you to get information on users and session privileges on authentication.
Quarantine - ASQ Bypass	This window displays the list of dynamically quarantined hosts.
VPN Tunnels	This window displays static information on the operation of VPN tunnels and on the source and destination.
Active Update	This window sets out the status of Active Update on the firewall for each type of update available.
Services	This window shows the active and inactive services on the firewall and how long they have been active/inactive.
Hardware	This window shows information on the initialization of high availability and RAID.
Filter policy	This window displays the active filter policy by grouping the implicit and local rules.
VPN policy	This window allows viewing the configuration of different VPN tunnel policies.
Logs	This window allows viewing in real time the size of the log file. - The sub-menu **`VPN`** provides information on VPN logs. - The sub-menu **`System`** provides system information.

2.1.5. Result display zone

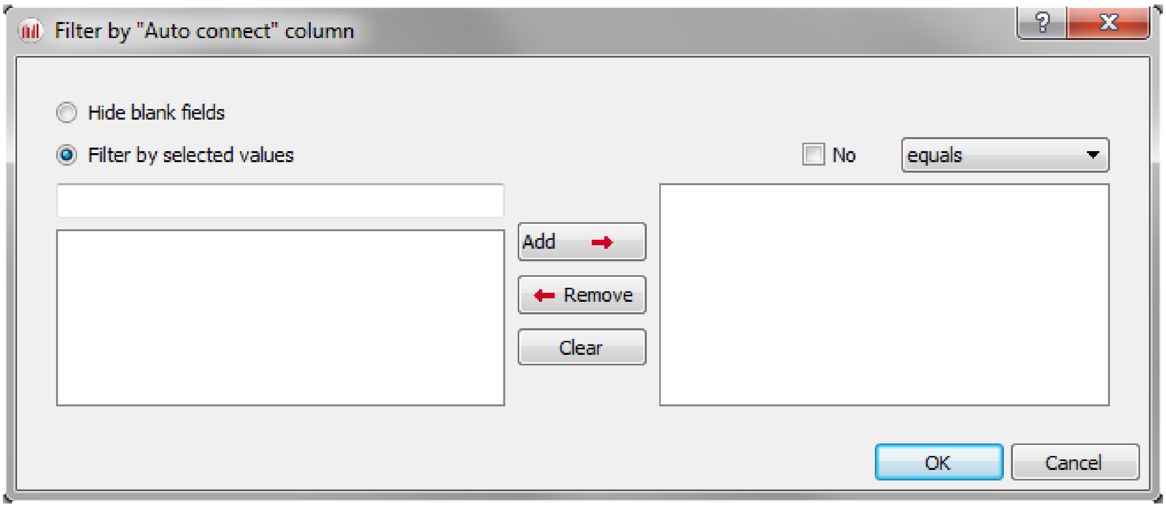
Data and options from the selected menus in the horizontal bar appear in this zone. These windows will be explained in further detail in the corresponding sections.

2.1.5.1. Contextual menu on columns

Right-clicking on a column header will display the following options

Filter by this column…	Isolates a set of events according to the criteria provided. For example, filtering by events with a “minor” protocol. When a filter has been applied to a column, the icon ▼ will appear in blue in the column label. For more information on the sort criteria, please refer to Appendix F: Sort criteria.]
Clear column filter	Removes the filter that was previously set on the column.
Clear all filters	Removes the filters set on all the columns.
Clear all filters except this	Removes the filters set on all the columns except for the filter on the selected column.
Hide column	Hides the selected column.
Columns	Allows selecting the columns to display.
Adjust column width to fit contents	Columns will be resized according to the contents.

When the menu `Filter by this column` is selected, the following screen will appear:



Filter by "Auto connect" column

○ Hide blank fields

● Filter by selected values

□ No

equals

Figure 7: Filter by this column

The screen relates to the column that had been selected previously. *(E.g.: Filter by the “Details” column)*.

- **Hide blank fields** option: allows displaying only fields that contain data.
- **Filter by selected values**: a value can be entered manually or selected from the suggested list.

To create a filter, you only need to select one or several values from the suggested list and add them in order for them to appear in the section to the right of the table.

You may use the following operators:

- Equals: the values found have to be equal to those selected.
- Contains: looks for a word in a phrase
- Begins with: looks for a phrase beginning with a string
- Ends with: looks for a phrase ending with a string.
- Joker (Wildcard): *See the table below.*
- Regular expression: cf. ***http://qt.nokia.com/doc/4.5/qregexp.html***

c	E.g., if “c” is entered, the system will search for all occurrences of “c”.
?	Allows searching for a single character.
*****	Allows searching for one or several characters.
[…]	Allows entering several characters between square brackets. For example, if [ABCD] is selected, the search will be conducted for A or B or C or D. If [A-D] is entered, the search will be for ABCD, if [A-Z] is entered, the search will be for all capital letters.

Events can therefore be filtered according to one or several values. For example, displaying events using the protocol HTTP or https.
It is also possible to negate a criterion by selecting the option **No**. For example, displaying all entries except if the protocol is HTTP.

- Columns can be resized according to their contents (option **Adjust columns to fit contents**).

Furthermore, the administrator can sort the table by clicking on the column by which he wishes to sort.

2.1.5.2. Contextual menu on lines

Right-clicking against a line will display a contextual menu that allows various operations. The options offered vary according to the table.

2.1.5.2.1. Overview

3 contextual menus can be opened in this window:

- When right-clicking against a firewall
- When right-clicking against an empty zone in the list of firewalls
- When right-clicking against in the “Connection logs” view

Contextual menu relating to a firewall

Show dashboard…	Opens the `Dashboard` menu of the selected firewall.
Generate an instant web	Clicking on this button will generate a report in HTML. This report will contain

report…	the following information at any given moment: system information, memory, connected users, services, Active Update status, bandwidth statistics, connection statistics, vulnerabilities, number of hosts, authenticated users, number of major and minor alarms, quarantine, the number of VPN tunnels, filter rules and configured IPSec tunnels.
Disconnect	Allows disconnecting from the selected firewall.
Remove this firewall from the connection list…	Enables disconnecting and deleting the entry that corresponds to this connection.
Add a new firewall to the connection list and connect to it	Displays the direct connection window to enable connecting to a firewall.
Add a firewall from the address book to the connection list	Opens the address book window to allow the selection of a registered firewall.
Add this firewall to the address book	Opens a window that will allow saving the selected firewall in the address book.
Edit the address book	Opens the address book window to enable editing.

Contextual menu from right-clicking against an empty zone

Add a new firewall to the connection list and connect to it	Displays the direct connection window to enable connecting to a firewall.
Add a firewall from the address book to the connection list	Opens the address book window to allow the selection of a registered firewall.
Edit the address book	Opens the address book window to enable editing.

Contextual menu relating to connection logs

Copy	Copies the selected log line(s).
Copy Link Location	Copies the location of the link.
Select all	Selects all the log lines.
Clear logs	Deletes all log lines.

2.1.5.2.2. Events

Right-clicking against a line containing an event will bring you to the contextual menu that will allow you to:

Filter by these criteria	This option allows restricting the list of results to the selected field. For example, if the data is filtered by the priority “Major”, the administrator will get all the lines containing “Major”. **NOTE:** Using this option will replace all the current filters on the columns
View source host…	Indicates the name of the source host. If this option is selected, the `Hosts` menu will open.
View destination host…	Indicates the name of the destination host.
Send source to quarantine	Allows quarantining the source host for a fixed period of 1 minute, 5 minutes, 30 minutes or 3 hours.
View packet...	Allows opening the tool that will allow viewing malicious packets.
Empty alarms	Purges the list of displayed alarms.
Copy to the clipboard	Copies the selected line to the clipboard.

2.1.5.2.3. Vulnerability Manager

In the Vulnerability tab, 3 contextual menus can be opened:

- When right-clicking against a line detailing a vulnerability
- When right-clicking against a line detailing a host
- When right-clicking against the help zone

Contextual menu relating to a vulnerability

Right-clicking against a line containing vulnerability will bring you to the contextual menu that will allow you to:

Filter this column by this criterion	This option allows restricting the list of results to the selected field. For example, if the data is filtered by the priority “Major”, the administrator will get all the lines containing “Major”. **NOTE:** Using this option will replace all the current filters on the columns
Filter only this column by this criteria	This option allows you to restrict the list of the results pointed to by the cursor. **Example** If your cursor pointed the destination / website consulted, the displayed list will only present the elements containing this destination / website.
Copy to the clipboard	Copies the selected line to the clipboard.

Contextual menu relating to a host

Right-clicking against a line containing a host will bring you to the contextual menu that will allow you to:

Filter this column by this criterion	This option allows restricting the list of results to the selected field. For example, if the data is filtered by the priority "Major", the administrator will get all the lines containing "Major". ℹ **NOTE:** Using this option will replace all the current filters on the columns
Filter only this column by this criteria	This option allows you to restrict the list of the results pointed to by the cursor. **Example** If your cursor pointed the destination / website consulted, the displayed list will only present the elements containing this destination / website.
View the host	The **Hosts** menu directory will open to display additional information on the detected host. During "pre-filtering", the host concerned will be selected. The data will be filtered according to the hostname if available, or by its address.
Copy to the clipboard	Copies the selected line to the clipboard. Data can be copied in two different ways: 1) A single line is selected: in this case, this line as well as the lines of details will be copied. 2) Several lines are selected: in this case, only these lines will be copied to the clipboard.

Contextual menu in the help zone

Right-clicking against a help zone will bring you to the contextual menu that will allow you to:

Copy	Allows copying the help text in order to retrieve it later
Copy the link	Allows copying the hypertext link.
Select all	Allows selecting all the help text.

In the Application tab, 2 contextual menus can be opened:

- When right-clicking against a line detailing an application
- When right-clicking against a line detailing a host

Contextual menu for a line containing an application

Right-clicking against a line containing an application will bring you to the contextual menu that will allow you to:

Filter by these criteria	This option allows restricting the list of results to the selected field. For example, if the data is filtered by the priority "Major", the administrator will get all the lines containing "Major". ℹ **NOTE:** Using this option will replace all the current filters on the columns
Filter only this column by this criteria	This option allows you to restrict the list of the results pointed to by the cursor. **Example** If your cursor pointed the destination / website consulted, the displayed list will only present the elements containing this destination / website.

Copy to the clipboard:	Copies the selected line to the clipboard. Data can be copied in two different ways: 1) A single line is selected: in this case, this line as well as the lines of details will be copied. 2) Several lines are selected: in this case, only these lines will be copied to the clipboard.

Contextual menu for a line containing a host

Filter this column by this criterion	This option allows restricting the list of results to the selected field. For example, if the data is filtered by the priority "Major", the administrator will get all the lines containing "Major". Caution: this is a new filter system… **NOTE:** Using this option will replace all the current filters on the columns
Filter only this column by this criteria	This option allows you to restrict the list of the results pointed to by the cursor. **Example** If your cursor pointed the destination / website consulted, the displayed list will only present the elements containing this destination / website.
View the host	The **Hosts** menu directory will open to display additional information on the detected host. During "pre-filtering", the host concerned will be selected. The data will be filtered according to the hostname if available, or by its address.

In the Information tab, 3 contextual menus can be opened:

- When right-clicking against a line containing information
- When right-clicking against a line detailing a host
- When right-clicking against the help zone

Contextual menu for a line containing information

Filter by these criteria	This option allows restricting the list of results to the selected field. For example, if the data is filtered by the priority "Major", the administrator will get all the lines containing "Major". **NOTE:** Using this option will replace all the current filters on the columns
Filter only this column by this criteria	This option allows you to restrict the list of the results pointed to by the cursor. **Example** If your cursor pointed the destination / website consulted, the displayed list will only present the elements containing this destination / website.
Copy to the clipboard	Copies the selected line to the clipboard. Data can be copied in two different ways: 1) A single line is selected: in this case, this line as well as the lines of details will be copied. 2) Several lines are selected: in this case, only these lines will be copied to the clipboard.

Contextual menu for a line containing an event

Right-clicking against a line containing an event will bring you to the contextual menu that will allow you to:

Filter by these criteria	This option allows restricting the list of results to the selected field. For example, if the data is filtered by the priority “Major”, the administrator will get all the lines containing “Major”. **NOTE:** Using this option will replace all the current filters on the columns
Filter only this column by this criteria	This option allows you to restrict the list of the results pointed to by the cursor. **Example** If your cursor pointed the destination / website consulted, the displayed list will only present the elements containing this destination / website.
View the host	The **Hosts** menu directory will open to display additional information on the detected host. During “pre-filtering”, the host concerned will be selected. The data will be filtered according to the hostname if available, or by its address.
Copy to the clipboard	Copies the selected line to the clipboard. Data can be copied in two different ways: 1) A single line is selected: in this case, this line as well as the lines of details will be copied. 2) Several lines are selected: in this case, only these lines will be copied to the clipboard.

Contextual menu in the help zone

Right-clicking against a help zone will bring you to the contextual menu that will allow you to:

- `Copy`: Allows copying the help text in order to retrieve it later.
- `Copy the link`: Allows copying the hypertext link.
- `Select all`: Allows selecting all the help text.

2.1.5.2.4. Hosts

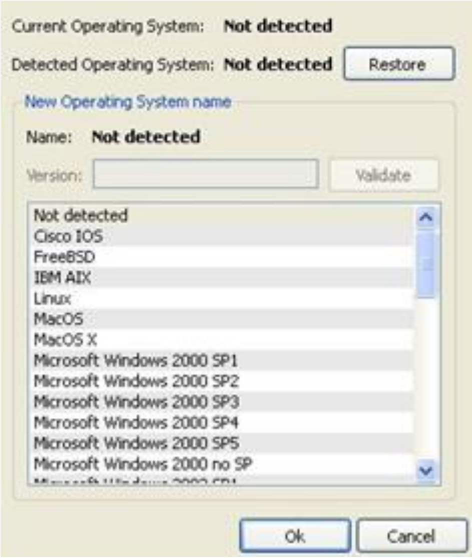
Many contextual menus can be opened in this window:

- When right-clicking against a host
- When right-clicking against the “Vulnerabilities” tab
- When right-clicking against the “Applications” tab
- When right-clicking against the “Information” tab
- When right-clicking against the “Connections” tab
- When right-clicking against the “Events” tab
- When right-clicking against the help zone

Contextual menu relating to a host

Filter by these criteria	This option allows restricting the list of results to the selected field. For example, if the data is filtered by the priority “Major”, the administrator will get all the lines containing “Major”. **NOTE:** Using this option will replace all the current filters on the columns
Filter only this column by this criteria	This option allows you to restrict the list of the results pointed to by the cursor. **Example** If your cursor pointed the destination / website consulted, the displayed list will only present the elements containing this destination / website.
Remove host from ASQ…	Enables deleting the host’s ASQ information. This may be useful especially if a host has been hacked. The “Monitor modify” privilege is necessary. A message will appear, asking you to confirm this action.
Reset Vulnerability Manager information	Resets VULNERABILITY MANAGER data for the selected host. The “Monitor modify” privilege is necessary. A message will appear, asking you to confirm this action. When you perform this reset, the host will be deleted from the VULNERABILITY MANAGER database and as well as from data counters (detected vulnerabilities, software…).
Send to quarantine	the quarantined host will be dynamically blocked for a duration to be specified. (This duration can either be 1 minute, 5 minutes, 30 minutes or 3 hours). The “Monitor modify” privilege is necessary. You will not be asked to confirm this action.

- **Manually set the Operating System:**



Current Operating System: **Not detected**

Detected Operating System: **Not detected**

New Operating System name

Name: **Not detected**

Version:

Not detected
Cisco IOS
FreeBSD
IBM AIX
Linux
MacOS
MacOS X
Microsoft Windows 2000 SP1
Microsoft Windows 2000 SP2
Microsoft Windows 2000 SP3
Microsoft Windows 2000 SP4
Microsoft Windows 2000 SP5
Microsoft Windows 2000 no SP

Figure 8: Manually set the OS

Current operating system	The OS that NETASQ VULNERABILITY MANAGER uses for detecting vulnerabilities on a host. The OS of a host may not be detected sometimes.
Detected operating system	OS that NETASQ VULNERABILITY MANAGER detects after performing a traffic scan on a host. The Restore button allows removing the OS indicated by the user and reverting to the OS detected by NETASQ VULNERABILITY MANAGER.
New OS name	In the event the host's OS is not detected by NETASQ VULNERABILITY MANAGER, it is possible to impose it by selecting it from the suggested list. In this case, 2 situations may arise: You are unable to specify the correct version (*examples: Android, Blackberry, etc*). In this case, the "Version" field will remain grayed out. Click on OK in order to force the OS to accept this value. You are able to specify the version (*example: Linux*). In this case, the "Version" field will be modifiable and you will be able to enter a version number (*example: 2.6*). Next, click on Validate. If VULNERABILITY MANAGER detects the version, a name will appear (*example, Linux 2.6.14*). To finish, click on OK in order to confirm your selection. Imposing the host's OS when it has not been detected will allow, in particular, viewing the vulnerabilities of services and products according to the system.

● **Copy to the clipboard** : Copies the selected line to the clipboard. Data can be copied in two different ways:

1) A single line is selected: in this case, this line as well as the lines of details will be copied.
2) Several lines are selected: in this case, only these lines will be copied to the clipboard.

Contextual menu in the "Vulnerabilities" tab

Filter this column by this criterion	This option allows restricting the list of results to the selected field. For example, if the data is filtered by the priority "Major", the administrator will get all the lines containing "Major". **NOTE** : Using this option will replace all the current filters on the columns
Filter only this column by this criteria	This option allows you to restrict the list of the results pointed to by the cursor. **Example** If your cursor pointed the destination / website consulted, the displayed list will only present the elements containing this destination / website.
Copy to the clipboard	Copies the selected line to the clipboard. Data can be copied in two different ways:: 1) A single line is selected: in this case, this line as well as the lines of details will be copied. 2) Several lines are selected: in this case, only these lines will be copied to the clipboard.

Contextual menu in the "Applications" tab

Filter this column by this criterion	This option allows restricting the list of results to the selected field. For example, if the data is filtered by the priority "Major", the administrator will get all the lines containing "Major". ℹ **NOTE:** Using this option will replace all the current filters on the columns
Filter only this column by this criteria	This option allows you to restrict the list of the results pointed to by the cursor. **Example** If your cursor pointed the destination / website consulted, the displayed list will only present the elements containing this destination / website.
Copy to the clipboard	Copies the selected line to the clipboard. All the elements as well as the root element will be added to the clipboard.

Contextual menu in the "Events" tab

Right-clicking against a line containing data will bring you to the contextual menu that will display the following information:

Filter this column by this criterion	This option allows restricting the list of results to the selected field. For example, if the data is filtered by the priority "Major", the administrator will get all the lines containing "Major". ℹ **NOTE:** Using this option will replace all the current filters on the columns
Filter only this column by this criteria	This option allows you to restrict the list of the results pointed to by the cursor. **Example** If your cursor pointed the destination / website consulted, the displayed list will only present the elements containing this destination / website.
List the hosts that present the same information	Allows filtering on hosts that have similar events.
Copy to the clipboard	Copies the selected line to the clipboard. Data can be copied in two different ways: 1) A single line is selected: in this case, this line as well as the lines of details will be copied. 2) Several lines are selected: in this case, only these lines will be copied to the clipboard.

Contextual menu in the "Connections" tab

Right-clicking against a line containing a connection will bring you to the contextual menu that will display the following information:

Filter this column by this criterion	This option allows restricting the list of results to the selected field. For example, if the data is filtered by the priority "Major", the administrator will get all the lines containing "Major". ℹ **NOTE:** Using this option will replace all the current filters on the columns

Filter only this column by this criteria	This option allows you to restrict the list of the results pointed to by the cursor. **Example** If your cursor pointed the destination / website consulted, the displayed list will only present the elements containing this destination / website.
View host	This option allows you to view only information of the selected host.
Copy to the clipboard	Copies the selected line to the clipboard. Data can be copied in two different ways: 1) A single line is selected: in this case, this line as well as the lines of details will be copied. 2) Several lines are selected: in this case, only these lines will be copied to the clipboard.

Contextual menu in the "Events" tab

Right-clicking against a line containing an alarm will bring you to the contextual menu that will display the following information:

Filter this column by this criterion	This option allows restricting the list of results to the selected field. For example, if the data is filtered by the priority "Major", the administrator will get all the lines containing "Major". ℹ **NOTE:** Using this option will replace all the current filters on the columns
Filter only this column by this criteria	This option allows you to restrict the list of the results pointed to by the cursor. **Example** If your cursor pointed the destination / website consulted, the displayed list will only present the elements containing this destination / website.
View the packet that raised the alarm	This will open the tool that will allow you to view malicious packets.
Copy to the clipboard	Copies the selected line to the clipboard. Data can be copied in two different ways: 1) A single line is selected: in this case, this line as well as the lines of details will be copied. 2) Several lines are selected: in this case, only these lines will be copied to the clipboard.

Contextual menu in the help zone

Right-clicking against a help zone will bring you to the contextual menu that will allow you to:

- **`Copy:`** Allows copying the help text in order to retrieve it later.
- **`Copy the link`**: Allows copying the hypertext link.
- **`Select all`**: Allows selecting all the help text.

2.1.5.2.5. Interfaces

Right-clicking against a line containing an interface will bring you to the contextual menu that will allow you to:

Filter by these criteria	This option allows restricting the list of results to the selected field. For example, if the data is filtered by the priority "Major", the administrator will get all the lines containing "Major".
Filter only this column by this criteria	This option allows you to restrict the list of the results pointed to by the cursor. **Example** If your cursor pointed the destination / website consulted, the displayed list will only present the elements containing this destination / website.
Display hosts associated with this interface	This option allows displaying the list of hosts that have the same interface.

2.1.5.2.6. Quality of Service

Please refer to chapter QUALITY OF SERVICE (QoS)
QUALITY OF SERVICE (QoS)

2.1.5.2.7. Users

2 contextual menus can be opened in this window:

- When right-clicking against the "users" zone
- When right-clicking against an "administration sessions" zone

Contextual menu from right-clicking against the "users" zone

Filter this column by this criterion	This option allows restricting the list of results to the selected field. For example, if the data is filtered by the priority "Major", the administrator will get all the lines containing "Major". **NOTE:** Using this option will replace all the current filters on the columns
Filter only this column by this criteria	This option allows you to restrict the list of the results pointed to by the cursor. **Example** If your cursor pointed the destination / website consulted, the displayed list will only present the elements containing this destination / website.
Remove user from ASQ	Enables deleting the user's ASQ information. This may be useful especially if a user has been affected by an attack. The "Monitor modify" privilege is necessary. A message will appear, asking you to confirm this action.
Copy to the clipboard	Copies the selected line to the clipboard. Data can be copied in two different ways: 1) A single line is selected: in this case, this line as well as the lines of details will be copied. 2) Several lines are selected: in this case, only these lines will be copied to the clipboard.

Contextual menu from right-clicking against the "administration sessions" zone

- **`Copy to the clipboard`**: Copies the selected line to the clipboard. Data can be copied in two different ways:
  1) A single line is selected: in this case, this line as well as the lines of details will be copied.
  2) Several lines are selected: in this case, only these lines will be copied to the clipboard.

2.1.5.2.8. Quarantine – ASQ Bypass

2 contextual menus can be opened in this window:

- When right-clicking against the "Quarantine" zone
- When right-clicking against an "ASQ Bypass" zone

Contextual menu from right-clicking against the "Quarantine" zone

Right-clicking against a line containing a quarantined host will bring you to the contextual menu that will allow you to:

Filter this column by this criterion	This option allows restricting the list of results to the selected field. For example, if the data is filtered by the priority "Major", the administrator will get all the lines containing "Major". **NOTE:** Using this option will replace all the current filters on the columns
Filter only this column by this criteria	This option allows you to restrict the list of the results pointed to by the cursor. **Example** If your cursor pointed the destination / website consulted, the displayed list will only present the elements containing this destination / website.
Copy to the clipboard	Copies the selected line to the clipboard.

Contextual menu from right-clicking against the "ASQ Bypass" zone

Right-clicking against a line containing a quarantined host will bring you to the contextual menu that will allow you to:

Filter this column by this criterion	This option allows restricting the list of results to the selected field. For example, if the data is filtered by the priority "Major", the administrator will get all the lines containing "Major".
Filter only this column by this criteria	This option allows you to restrict the list of the results pointed to by the cursor. **Example** If your cursor pointed the destination / website consulted, the displayed list will only present the elements containing this destination / website.
Copy to the clipboard	Copies the selected line to the clipboard.

2.1.5.2.9. VPN Tunnels

Right-clicking against a line containing a VPN tunnel will bring you to the contextual menu that will allow you to:

- **Filter this column by this criterion:** This option allows restricting the list of results to the selected field. For example, if the data is filtered by the priority "Major", the administrator will get all the lines containing "Major".
- **Filter only this column by this criteria :** This option allows you to restrict the list of the results pointed to by the cursor. **Example :** If your cursor pointed the destination / website consulted, the displayed list will only present the elements containing this destination / website.
- **View logs of outgoing SPIs:** this option will allow displaying the SPIs of the negotiated outgoing SA.
- **View logs of incoming SPIs:** this option will allow displaying the SPIs of the negotiated incoming SA.
- **View the outgoing policy**: hypertext link enabling the display of the outgoing policy visible in the `VPN Policy` menu.
- **View the incoming policy:** hypertext link enabling the display of the incoming policy visible in the `VPN Policy` menu.
- **Reset this tunnel:** the selected tunnel will be deleted, but the configuration on the firewalls will still be active. The SAs matching the selected tunnel will be cleared; new SAs will have to be renegotiated so that the tunnel can be used again.
- **Reset all tunnels:** all tunnels will be deleted.

2.1.5.2.10. Active Update

Right-clicking against a line in the Active Update section will bring you to the contextual menu that will allow you to:

- **Copy to the clipboard:** Copies the selected line to the clipboard. Data can be copied in two different ways:

1) A single line is selected: in this case, this line as well as the lines of details will be copied.
2) Several lines are selected: in this case, only these lines will be copied to the clipboard.

2.1.5.2.11. Services

Right-clicking against a line containing a service will bring you to the contextual menu that will allow you to:

Filter this column by this criterion	This option allows restricting the list of results to the selected field. For example, if the data is filtered by the priority "Major", the administrator will get all the lines containing "Major". **NOTE:** Using this option will replace all the current filters on the columns
Filter only this column by	This option allows you to restrict the list of the results pointed to by the cursor.

this criteria	**Example** If your cursor pointed the destination / website consulted, the displayed list will only present the elements containing this destination / website.
Copy to the clipboard	Copies the selected line to the clipboard. Data can be copied in two different ways: 1) A single line is selected: in this case, this line as well as the lines of details will be copied. 2) Several lines are selected: in this case, only these lines will be copied to the clipboard.

2.1.5.2.12. Hardware

This is the menu dedicated to high availability. Please refer to sections 3.2.6 and 5.5.

2.1.5.2.13. Filter policy

This menu allows you to view different types of rules :

- Implicit rules
  - Global filtering rules
  - Local filtering rules
  - NAT rules for local

For more information, please refer to section 6.1.

2.1.5.2.14. VPN Policy

Right-clicking against a line containing a VPN policy will bring you to the contextual menu that will allow you to:

- **Filter this column by this criterion:** This option allows restricting the list of results to the selected field. For example, if the data is filtered by the priority "Major", the administrator will get all the lines containing "Major".
- **View corresponding tunnels**: this will open the VPN Tunnels menu with a filter.

2.1.5.2.15. Logs

VPN

Right-clicking against a line containing a VPN policy will bring you to the contextual menu that will allow you to:

Filter this column by this criterion	This option allows restricting the list of results to the selected field. For example, if the data is filtered by the priority "Major", the administrator will get all the lines containing "Major". ℹ **NOTE:** Using this option will replace all the current filters on the columns

Filter only this column by this criteria	This option allows you to restrict the list of the results pointed to by the cursor. **Example** If your cursor pointed the destination / website consulted, the displayed list will only present the elements containing this destination / website.
Copy to the clipboard	Copies the selected line to the clipboard.

System

Right-clicking against a line in the System section will bring you to the contextual menu that will allow you to:

- `Filter this column by this criterion:` This option allows restricting the list of results to the selected field. For example, if the data is filtered by the priority “Major”, the administrator will get all the lines containing “Major”.

NOTE:

Using this option will replace all the current filters on the columns.

- `Filter only this column by this criteria:` This option allows you to restrict the list of the results pointed to by the cursor. **Example** : if your cursor pointed the destination / website consulted, the displayed list will only present the elements containing this destination / website.
- `Copy to the clipboard:` Copies the selected line to the clipboard.

2.1.6. Status bar

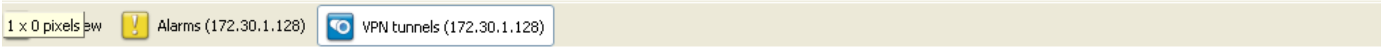


Figure 9: Status bar

The status bar contains menus from the menu directory that may have been opened during a session. Being able to do so is particularly useful when you are monitoring several firewalls at a time. You will be able to get back the same information window for each firewall and thus make simultaneous comparisons.

2.1.7. Button bar

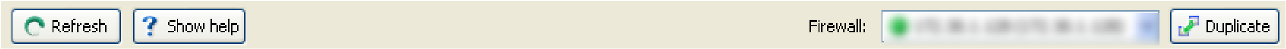


Figure 10: Button bar

This bar appears in most menus in Monitor.

2.1.7.1. Refresh

This button allows you to reinitialize the list displayed (Alarms, VULNERABILITY MANAGER, Hosts, Interfaces, Quality of Service, Users, Quarantine, VPN Tunnels, Active Update, Services, Hardware, Filter Policy, VPN, Logs).

2.1.7.2. Show/Hide help

This button allows you to show or hide a help screen. Subsequently, you only need to click on the selected line to get help when necessary.

2.1.7.3. Firewall

This drop-down menu allows you to filter the list of alarms on a selected firewall.

2.1.7.4. Duplicate

The window can be duplicated using the button found in it. This comes in handy especially when you wish to change the target (firewall or <all>) and view.

2.1.8. Search engine

The search zone is presented in 2 different formats:

1st format: the bar shown below can be seen on all screens except for the “Events” screen.

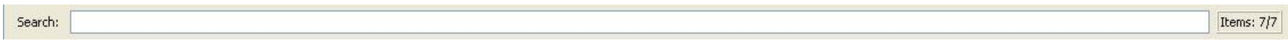


Figure 11: Search zone

2nd format: the bar below appears in the Events menu.

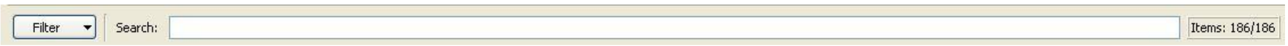


Figure 12: Search zone - Events

The **Filters** button contains the filters defined by the application and allows obtaining only the “Alarm”, “Virus”, “Connection”, “Web”, “Mail”, “FTP” and “Filter” lines.

2.1.8.1. Search

In this zone, you will be able to conduct searches through elements in the list. Elements are filtered at the same time search criteria are being entered.

2.2. INTRODUCTION TO MENUS

2.2.1. File

The **File** menu concerns connections to the firewall and the application's general options.

Address book…	Configures the firewalls' address books.
Direct connection…	Opens a new Firewall connection window. Enter the IP address of the Firewall and the user password.
Application settings…	Determines the behavior that Monitor should adopt at startup, enables getting a packet analyzer, defining a destination folder for reports, and the language used in the graphical interface.
Default monitoring settings…	Configures memory, connection timeout and the frequency with which different parameters will be refreshed.
Quit	Disconnects monitors and shuts down the application.

2.2.2. Windows

The **Windows** menu enables managing the display windows of the different connected firewalls:

Maximize	Opens the selected window.
Cascade	Arranges the various connection windows in cascade.
Title	Gives a global view of the main services offered by Monitor.
Duplicate current window	Duplicates the current window according to the firewall that you had selected earlier.
Overview	IP address of connected firewall(s).
Firewall address	The drop-down menu indicates the last screens visited and identifies the current screen with a tick.

2.2.3. Applications

The **Applications** menu enables connecting to other applications in the NETASQ Administration Suite. Using the two shortcuts provided the added advantage of not having to reauthenticate on both applications.

Launch NETASQ UNIFIED MANAGER	Enables opening the NETASQ firewall configuration software.
Launch NETASQ EVENT REPORTER	Enables opening the **NETASQ EVENT REPORTER** module from the Administration Suite.

2.2.4. ? (Help)

Help	Opens a page that accesses your secure-access area, to allow you to obtain documentation.
About…	Provides information on the monitor in use (version number, credits).

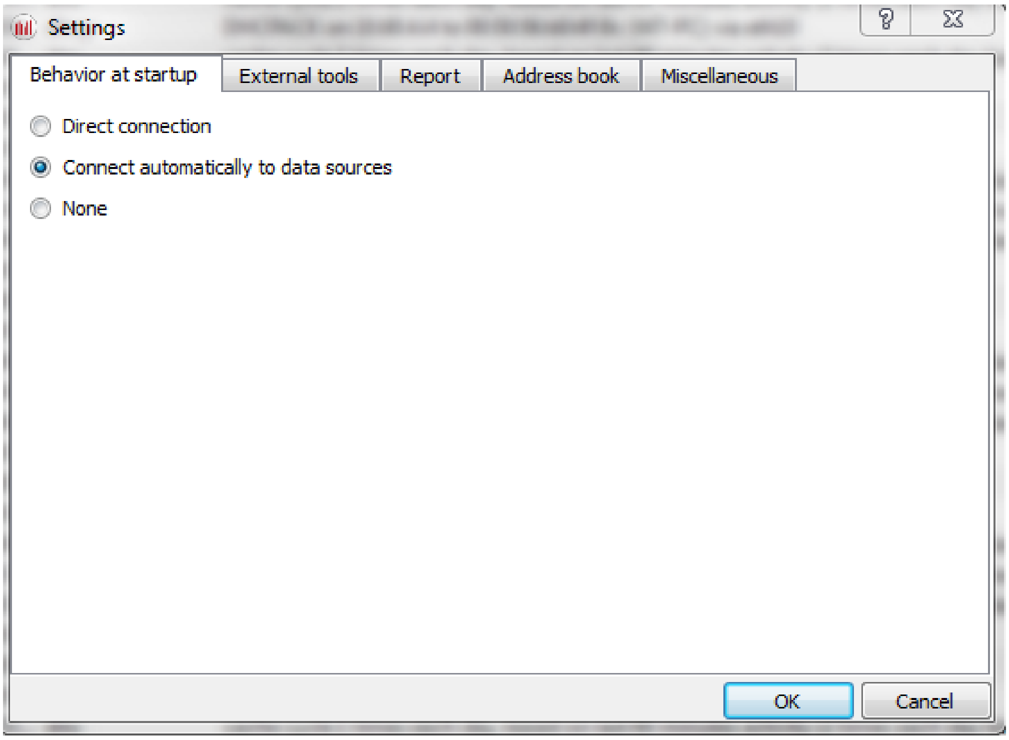
2.3. APPLICATION SETTINGS

Certain parameters can be configured in the **NETASQ REAL-TIME MONITOR** application.

➲ Select the menu **`File\Application settings…`**: the parameters window will appear.

2.3.1. Behavior at startup

This tab offers the different options that enable configuring the application's behavior at startup.



Settings

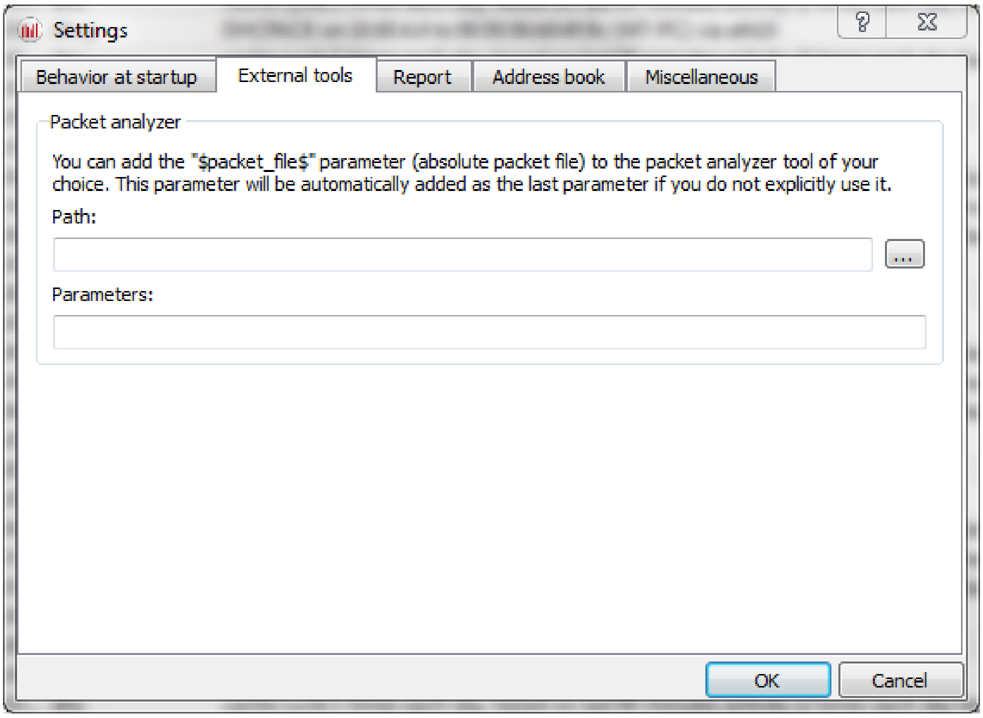
Behavior at startup | External tools | Report | Address book | Miscellaneous

○ Direct connection
● Connect automatically to data sources
○ None

Figure 13: Behavior at startup

Direct connection	If this option is selected, the direct connection window will open when Monitor starts up. It will enable you to enter the IP address of the desired firewall and the user password.
Connect automatically to data sources	If this option is selected, the connection will be established automatically on different firewalls in the address book.
None	The **`Overview`** window will open but Monitor will not connect to any firewall.

2.3.2. External tools



Settings

Packet analyzer

You can add the "$packet_file$" parameter (absolute packet file) to the packet analyzer tool of your choice. This parameter will be automatically added as the last parameter if you do not explicitly use it.

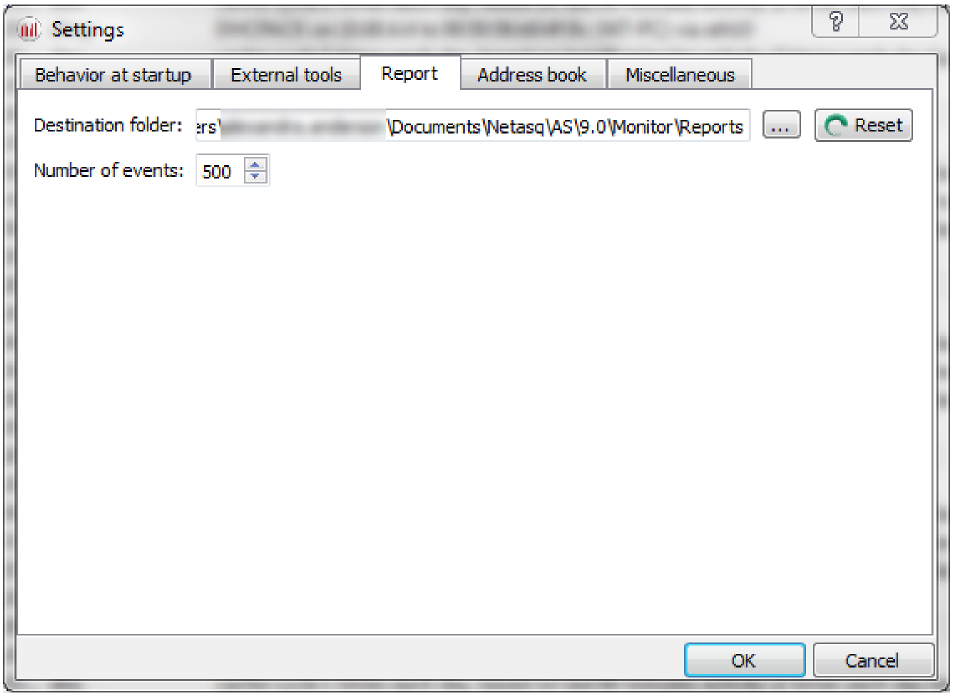
Path:

Parameters:

Figure 14: Settings – External tools

Packet analyzer	When an alarm is triggered on a NETASQ Firewall, the packet responsible for setting off the alarm can be viewed. In order to do this, you need a packet viewing tool like **Ethereal** or **Packetyzer**. Specify the selected tool in the field “Packet analyzer”, which the Monitor will use to display malicious packets.
Path	Indicates the location of the directory containing the application that allows analyzing packets.
Parameters	The parameter “$packet_file$” can be added to the packet analyzer.

2.3.3. Report



Settings [redacted]

Destination folder: ers\[redacted]\Documents\Netasq\AS\9.0\Monitor\Reports

Number of events: 500

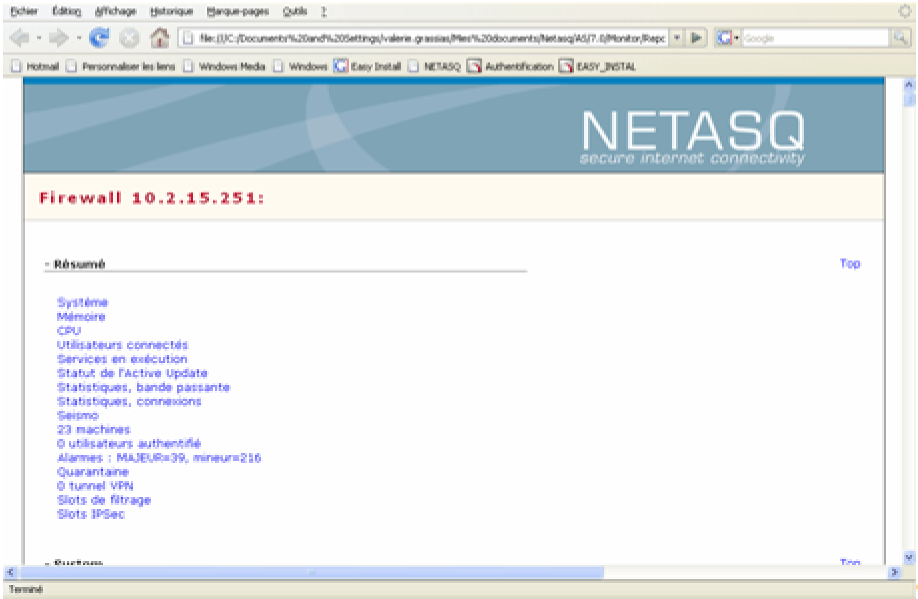
Figure 15: Settings – Report

Destination folder	Enables selecting the destination folder for the report. The **Reset** button allows you to reset the directory for storing reports.
Number of events	Allows defining the number of events desired when generating the report. By default, the value is set to 500 lines.

REMARK

The report can be generated by right-clicking on a line in the **`Overview`** menu and by selecting the option **`Generate a web report...`**

The report contains the following information:



Firewall 10.2.15.251:

- Résumé

Top

Système
Mémoire
CPU
Utilisateurs connectés
Services en exécution
Statut de l'Active Update
Statistiques, bande passante
Statistiques, connexions
Seismo
23 machines
0 utilisateurs authentifié
Alarmes : MAJEUR=39, mineur=216
Quarantaine
0 tunnel VPN
Slots de filtrage
Slots IPSec

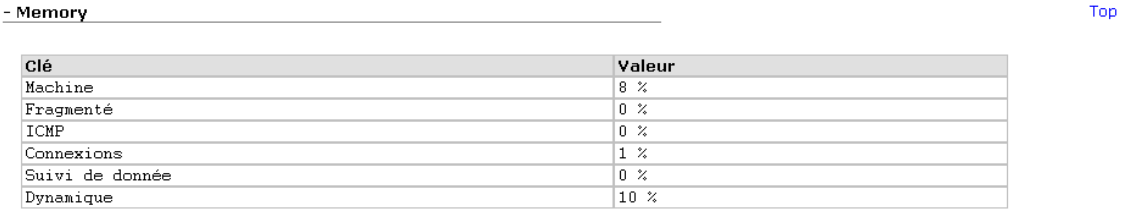
- Système

Top

Figure 16: Synthesis report

It displays information regarding the firewall for which you intended to generate a report. By clicking on a link in the list, the information will be displayed in table or graph form.

In the example below, information on memory is displayed.



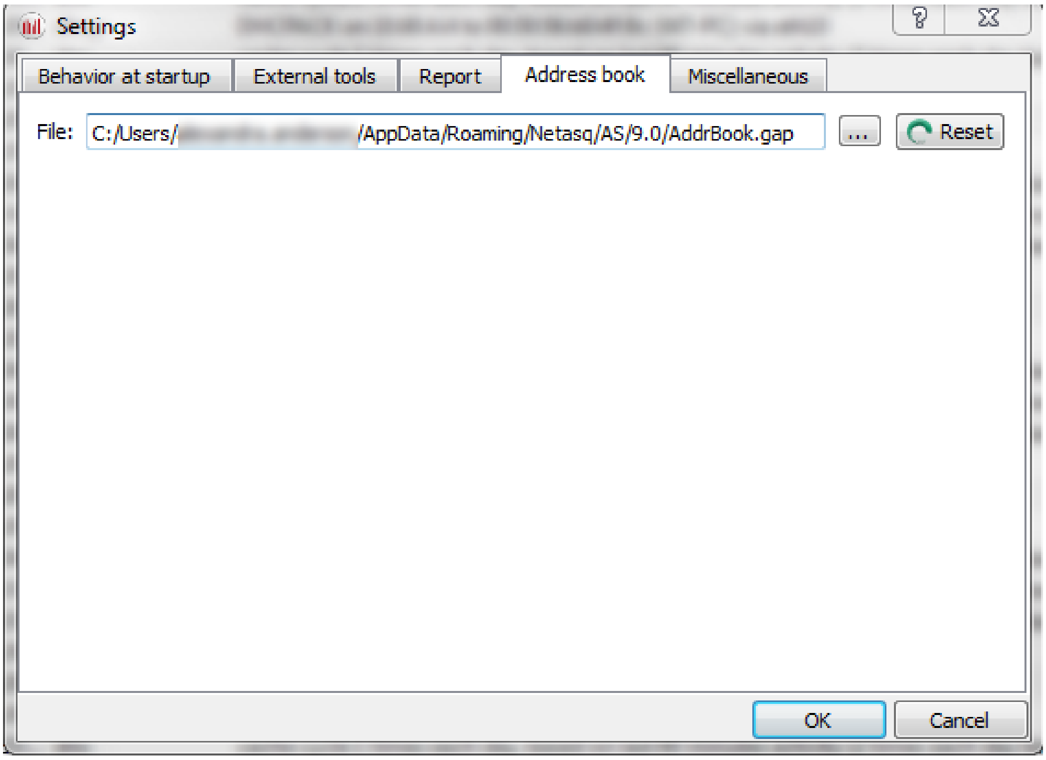
- Memory

Top

Clé	Valeur
Machine	8 %
Fragmenté	0 %
ICMP	0 %
Connexions	1 %
Suivi de donnée	0 %
Dynamique	10 %

Figure 17: Memory information

2.3.4. Address book

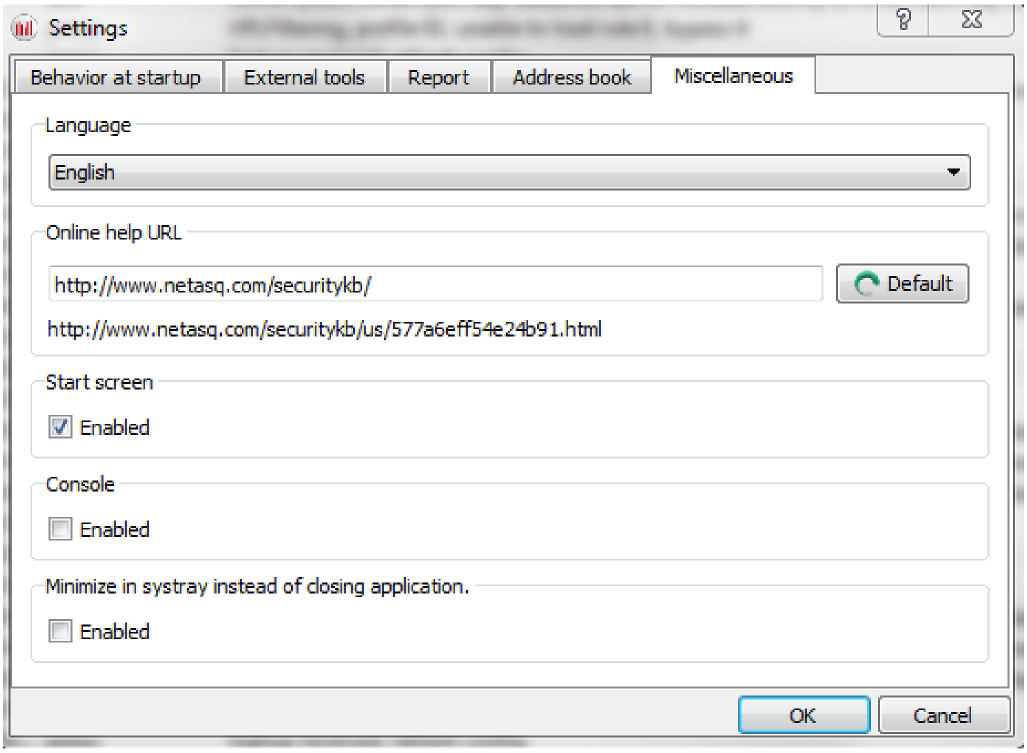


File: C:/Users/[redacted]/AppData/Roaming/Netasq/AS/9.0/AddrBook.gap

Figure 18: Settings – Address book

The NETASQ UNIFIED MANAGER, NETASQ REAL-TIME MONITOR and NETASQ EVENT REPORTER applications use the same address book and therefore the same address book file.
To retrieve a .gap file (NETASQ project file), simply click on “Browse”.

2.3.5. Miscellaneous



Settings

Language

English

Online help URL

http://www.netasq.com/securitykb/

http://www.netasq.com/securitykb/us/577a6eff54e24b91.html

Start screen

☑ Enabled

Console

□ Enabled

Minimize in systray instead of closing application.

□ Enabled

Figure 19: Settings – Miscellaneous

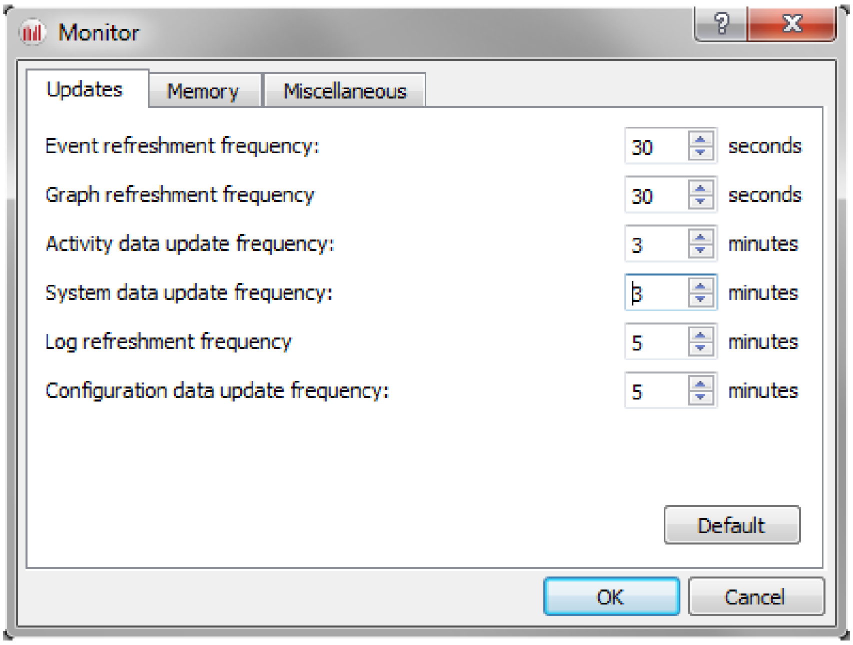
Language	You can select a language for the interface's menus. The automatic selection will choose the language installed on the PC's Windows OS. After a language selection, the Firewall Monitor must be restarted in order to apply the change.
Online help URL	This option allows you to access at any time at the base of knowledge NETASQ.
Splash screen	If you select this option, the first window that appears on startup will contain the name, logo, version and loading status of the software. If it is not selected, the start screen will no longer be displayed.
Console	If the option **Enable** is selected, you will be able to access firewalls in console mode (CLI commands). When this window is validated, a `Console` menu will be added under the `Overview` menu directory.
Minimize in systray instead of closing application	If this option is selected, the application will be minimized in Systray instead of being shut down.

2.4. DEFAULT MONITORING SETTINGS

This menu enables configuring when all information contained in Monitor will be refreshed. There are 6 parameters that regulate the frequence of data retrieval. You can define how long the different logs (in number of lines) and datagrams (in minutes) will be displayed.

➲ The default parameters for monitoring can be accessed from the menu **`File\Default monitoring settings.`**

2.4.1. Updates



Monitor

Event refreshment frequency: 30 seconds

Graph refreshment frequency 30 seconds

Activity data update frequency: 3 minutes

System data update frequency: 3 minutes

Log refreshment frequency 5 minutes

Configuration data update frequency: 5 minutes

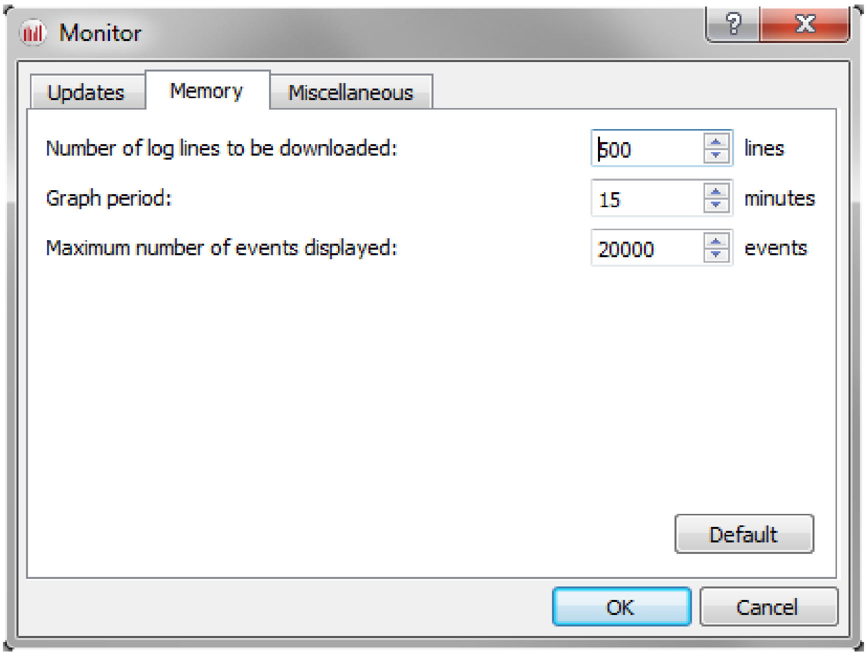
Figure 20: Monitor – Updates

Event refreshment frequency	Specifies in seconds when the list of detected events will be refreshed. The refreshment frequency is set to 30 seconds by default and may be a minimum of 1 second and a maximum of 3600 seconds.
Graph refreshment frequency	Specifies in seconds when graphs (Statistics, Interfaces, QoS and VPN SA) will be refreshed. The refreshment frequency is set to 30 seconds by default and may be a minimum of 10 seconds.
Activity data refreshment frequency	Specifies in minutes when activity data (hosts, authenticated users and Vulnerability Manager) will be refreshed. The refreshment frequency is set to 3 minutes by default and may be a minimum of 1 minute.
System data refreshment frequency	Specifies in minutes when system data (session data, high availability, RAID, cryptography card, quarantine, services and Active Update) will be refreshed. The refreshment frequency is set to 3 minutes by default and may be a minimum of 1 minute.
Log refreshment frequency	Specifies in minutes when log data (Log space, filters, VPN, system, traffic and filter logs) will be refreshed. The refreshment frequency is set to 5 minutes by default and may be a minimum of 1 minute.
Configuration data update frequency	Specifies in minutes when configuration data (Anti spam, anti-virus, proxies, SPD and system properties) will be refreshed. The refreshment frequency is set to 5 minutes by default and may be a minimum of 1 minute.

REMARK

The Default button allows you to reset the parameters to their default values.

2.4.2. Memory



Monitor

Number of log lines to be downloaded: 500 lines

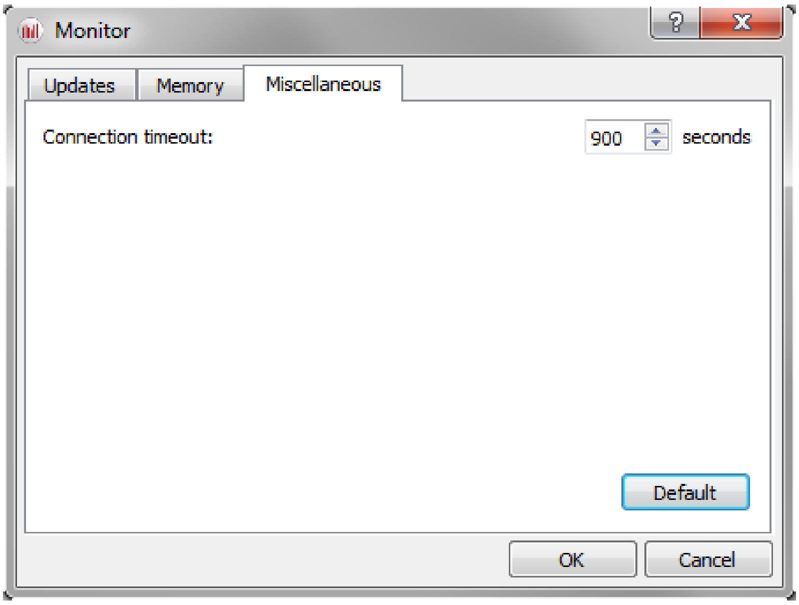
Graph period: 15 minutes

Maximum number of events displayed: 20000 events

Figure 21: Monitor – Memory

Number of log lines to be downloaded	Configures the number of log lines you wish to display in the `Traffic` menu.
Graph period	Indicates how long graphs will be displayed (Statistics from the `Interfaces` menu).
Maximum number of events displayed	Configures the number of event lines that you wish to display in the `Events` menu. By default, the value is set to 20,000 events and may be a minimum of 1 events and a maximum of 2,000,000 events. The number of alarm lines indicated influences the memory used: The memory used for 150,000 event lines indicated for a firewall is about 220 MB. The memory used for 300,000 event lines indicated for a firewall is about 430 MB.

2.4.3. Miscellaneous



Connection timeout: 900 seconds

Figure 22: Monitor – Miscellaneous

Connection timeout	When the firewall does not respond, the connection will be shut down at the end of the period determined in this field.

3. INFORMATION ON FIREWALLS

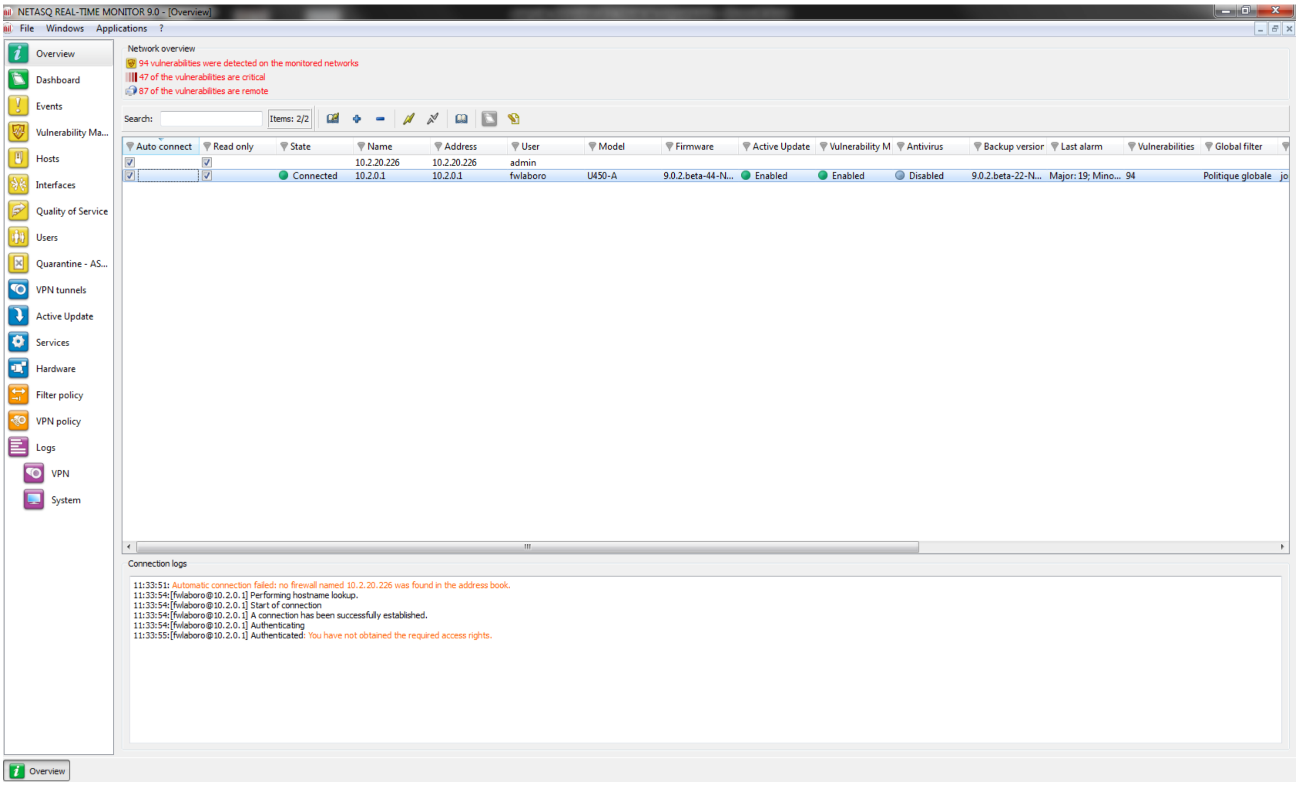
3.1. OVERVIEW

3.1.1. Introduction

➲ From the menu directory, the **Overview** menu allows you to display several types of information regarding your firewalls. Once the connection with the firewall is established, this information will be available.

The **Overview** menu consists of five zones:

- The menu directory
- An overview of information on vulnerabilities found on your network.
(Corresponds to the ***Part 4/Chapter2: VULNERABILITY MANAGER*** menu)
- A search and icon bar
- A list of your firewalls
- A view of connection logs



Network overview

94 vulnerabilities were detected on the monitored networks
47 of the vulnerabilities are critical
87 of the vulnerabilities are remote

Search: Items: 2/2

Auto connect	Read only	State	Name	Address	User	Model	Firmware	Active Update	Vulnerability M	Antivirus	Backup versior	Last alarm	Vulnerabilities	Global filter	
☑	☑		10.2.20.226	10.2.20.226	admin										
☑	☑	● Connected	10.2.0.1	10.2.0.1	fwlaboro	U450-A	9.0.2.beta-44-N...	● Enabled	● Enabled	● Disabled	9.0.2.beta-22-N...	Major: 19; Mino...	94	Politique globale	jo

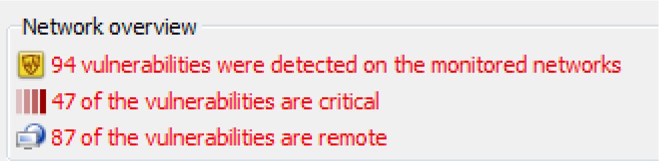
Connection logs

```
11:33:51: Automatic connection failed: no firewall named 10.2.20.226 was found in the address book.
11:33:54:[fwlaboro@10.2.0.1] Performing hostname lookup.
11:33:54:[fwlaboro@10.2.0.1] Start of connection
11:33:54:[fwlaboro@10.2.0.1] A connection has been successfully established.
11:33:54:[fwlaboro@10.2.0.1] Authenticating
11:33:55:[fwlaboro@10.2.0.1] Authenticated: You have not obtained the required access rights.
```

Figure 23: Overview

3.1.2. Overview of information on vulnerabilities

This view indicates the number of vulnerabilities found, the number of critical vulnerabilities and the number of vulnerabilities that are remotely accessible on your networks. These indications represent links that allowing access to these vulnerabilities (VULNERABILITY MANAGER menu).



Network overview
94 vulnerabilities were detected on the monitored networks
47 of the vulnerabilities are critical
87 of the vulnerabilities are remote

Figure 24: Network overview

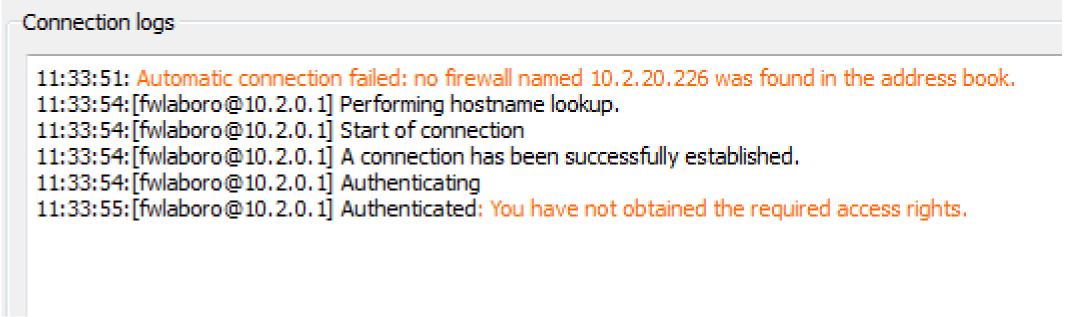
3.1.3. List of firewalls

This view provides the following information on your product(s):

Auto connect	Selecting this option allows you to activate automatic reconnection of **NETASQ REAL-TIME MONITOR** in the event of a disconnection.
Read-only	Select this option to activate read-only mode.
State	Indicates the product’s connection status. Options: **Connected**/**Disconnected**.
Name	Product’s name or IP address if the name has not been indicated.
Address	Firewall’s IP address.
User	Login of the connected administrator account.
Model	Product model: U250, U6000…
Firmware	Version of the firmware monitored in Firewall Monitor’s "Firmware".
Active Update	Indicates the update status of the Active Update module. Options: **OK** or **x failure (s).**
VULNERABILITY MANAGER	Indicates the number of vulnerabilities.
Antivirus	Indicates the status of the antivirus. Options: **OK**/**Disabled**.
Backup version	Version number of the backup module or of the firmware in the passive partition.
Last alarms	Indicates the number of major and minor alarms for the latest alarms (over the past 15 minutes). The maximum value is 100 even if the number of alarms exceeds this value.
Vulnerabilities	Indicates the number of vulnerabilities.
Global filter	Indicates whether a global filter rule has been activated. If so, “Global policy” will be indicated.
Filter	Indicates the name of the active filter slot.
VPN	Indicates the name of the active VPN slot.
URL	Indicates the name of the active URL slot.
NAT	Indicates the name of the active NAT slot.
Uptime	Amount of time that the firewall has been running since the last startup.
Session	Indicates the number of sessions opened on the firewall.
Comments	Comments or descriptions of the firewall.

3.1.4. Connection logs

This window indicates logs of connections between **NETASQ REAL-TIME MONITOR** and the firewall.



```
11:33:51: Automatic connection failed: no firewall named 10.2.20.226 was found in the address book.
11:33:54:[fwlaboro@10.2.0.1] Performing hostname lookup.
11:33:54:[fwlaboro@10.2.0.1] Start of connection
11:33:54:[fwlaboro@10.2.0.1] A connection has been successfully established.
11:33:54:[fwlaboro@10.2.0.1] Authenticating
11:33:55:[fwlaboro@10.2.0.1] Authenticated: You have not obtained the required access rights.
```

Figure 25: Connection logs

TIP

You can erase logs by right-clicking on the "Connection logs" view DASHBOARD

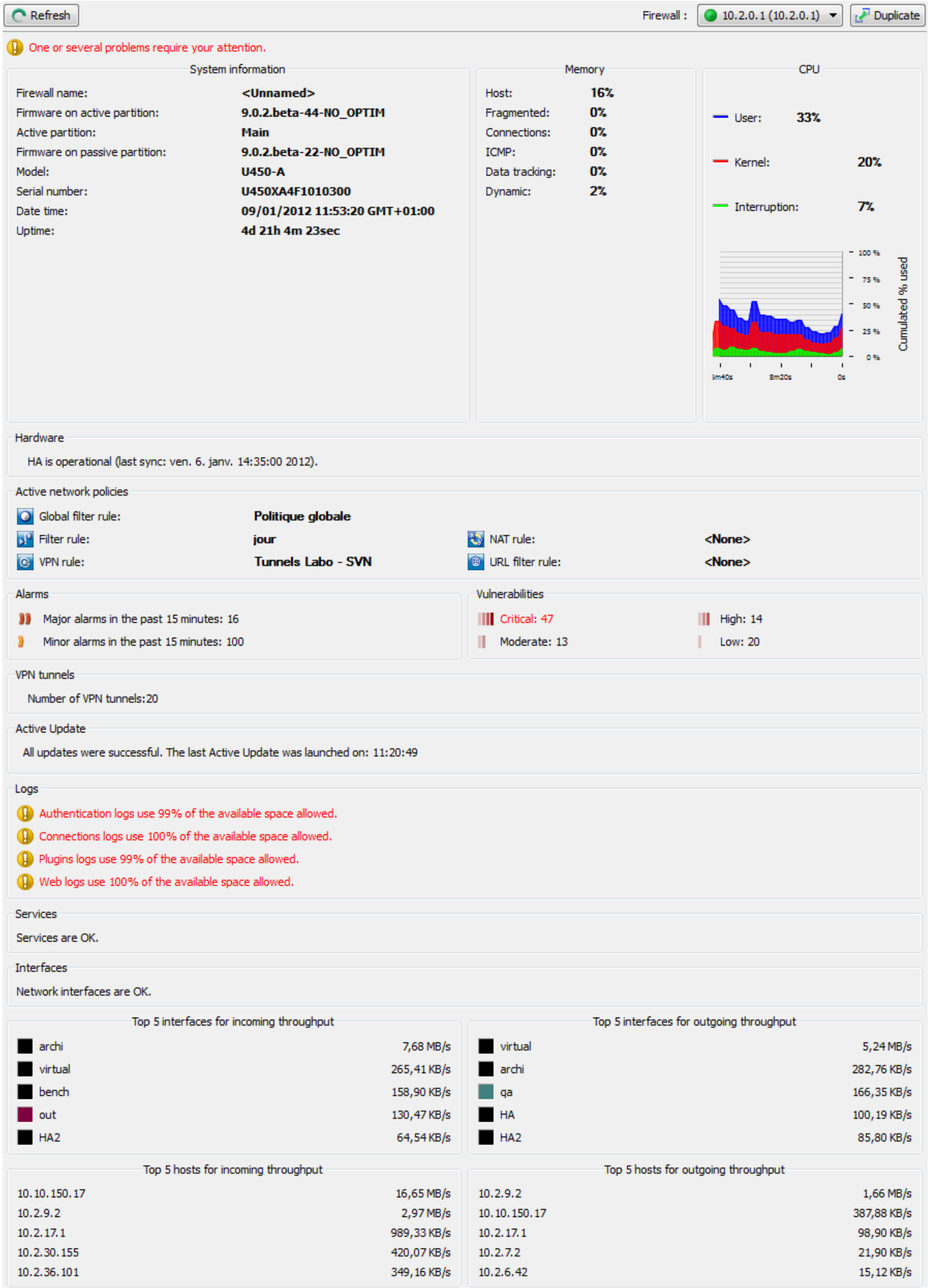
3.2. DASHBOARD

3.2.1. Introduction

➲ The **Dashboard** menu allows displaying on a single screen all the useful information concerning real-time monitoring.

It basically picks out useful information from some of the menus in the **NETASQ REAL-TIME MONITOR** menu directory and adds on other additional information. The data displayed in this window are:

- System information
- Memory
- CPU
- Hardware
- Active network policies
- Alarms
- Vulnerabilities
- VPN tunnels
- Active Update
- Logs
- Services
- Interfaces
- Top 5 interfaces for incoming throughput
- Top 5 interfaces for outgoing throughput
- Top 5 hosts for incoming throughput
- Top 5 hosts for outgoing throughput



One or several problems require your attention.

System information

Firewall name:	<Unnamed>
Firmware on active partition:	9.0.2.beta-44-NO_OPTIM
Active partition:	Main
Firmware on passive partition:	9.0.2.beta-22-NO_OPTIM
Model:	U450-A
Serial number:	U450XA4F1010300
Date time:	09/01/2012 11:53:20 GMT+01:00
Uptime:	4d 21h 4m 23sec

Memory

Host:	16%
Fragmented:	0%
Connections:	0%
ICMP:	0%
Data tracking:	0%
Dynamic:	2%

CPU

User:	33%
Kernel:	20%
Interruption:	7%

Hardware

HA is operational (last sync: ven. 6. janv. 14:35:00 2012).

Active network policies

Global filter rule:	Politique globale		
Filter rule:	jour	NAT rule:	<None>
VPN rule:	Tunnels Labo - SVN	URL filter rule:	<None>

Alarms

Major alarms in the past 15 minutes: 16

Minor alarms in the past 15 minutes: 100

Vulnerabilities

Critical: 47	High: 14
Moderate: 13	Low: 20

VPN tunnels

Number of VPN tunnels:20

Active Update

All updates were successful. The last Active Update was launched on: 11:20:49

Logs

Authentication logs use 99% of the available space allowed.

Connections logs use 100% of the available space allowed.

Plugins logs use 99% of the available space allowed.

Web logs use 100% of the available space allowed.

Services

Services are OK.

Interfaces

Network interfaces are OK.

Top 5 interfaces for incoming throughput

archi	7,68 MB/s
virtual	265,41 KB/s
bench	158,90 KB/s
out	130,47 KB/s
HA2	64,54 KB/s

Top 5 interfaces for outgoing throughput

virtual	5,24 MB/s
archi	282,76 KB/s
qa	166,35 KB/s
HA	100,19 KB/s
HA2	85,80 KB/s

Top 5 hosts for incoming throughput

10.10.150.17	16,65 MB/s
10.2.9.2	2,97 MB/s
10.2.17.1	989,33 KB/s
10.2.30.155	420,07 KB/s
10.2.36.101	349,16 KB/s

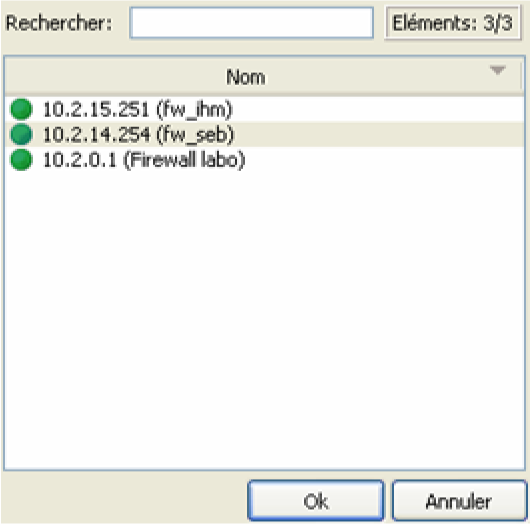
Top 5 hosts for outgoing throughput

10.2.9.2	1,66 MB/s
10.10.150.17	387,88 KB/s
10.2.17.1	98,90 KB/s
10.2.7.2	21,90 KB/s
10.2.6.42	15,12 KB/s

Figure 26: Dashboard

3.2.2. Selecting a product

When you click on the **Dashboard** menu, a product selector window may open if several firewalls have been registered.



Rechercher: Eléments: 3/3

Nom

- ● 10.2.15.251 (fw_ihm)
- ● 10.2.14.254 (fw_seb)
- ● 10.2.0.1 (Firewall labo)

Figure 27: Search

1 If the list of firewalls is long, look for the desired firewall using the **Search** field.

2 Select the firewall.

3 Click on **OK**. The Dashboard of the desired firewall will appear.

3.2.3. System information

Firewall name	Name given to the product when it was registered in the address book.
Firmware on active partition	Version of the active partition’s firmware.
Active Partition	Partition on which the firewall was booted.
Firmware on passive partition	Version of the passive partition’s firmware.
Model	Firewall’s model number.
Serial number	Firewall’s serial number.
Date-time	Current date and time.
Uptime	Amount of time that the firewall has been running since the last startup.

3.2.4. Memory

This refers to the use (in percentage) of memory reserved for storing information (buffer). The buffer is linked to the stateful module and corresponds to saving the context.

Host	Host stack
Fragmented	Fragmented packets
Connections	All TCP/IP connections.
ICMP	ICMP requests (Ping, trace route...).
Data tracking	Memory used for monitoring connections.
Dynamic	Percentage of ASQ memory being used.

Buffer sizes vary according to product type and product version.

Cleaning algorithms optimize the operation of “Hosts”, “Fragmented”, “ICMP” and “Connections” buffers. Entries in the “Fragmented” and “ICMP” buffers are initialized at fixed intervals (each entry has a limited lifetime: TTL).

This illustrates part of the Firewall’s activity. A high percentage may mean the Firewall is overloaded or that an attack has been launched.

3.2.5. CPU

DEFINITION
Better known as a “processor”, this is the internal firewall resource that performs the necessary calculations.

User:	CPU time allocated to the management of user processes.
Kernel:	CPU time that the kernel consumes
Interruption:	CPU time allocated for interruptions.

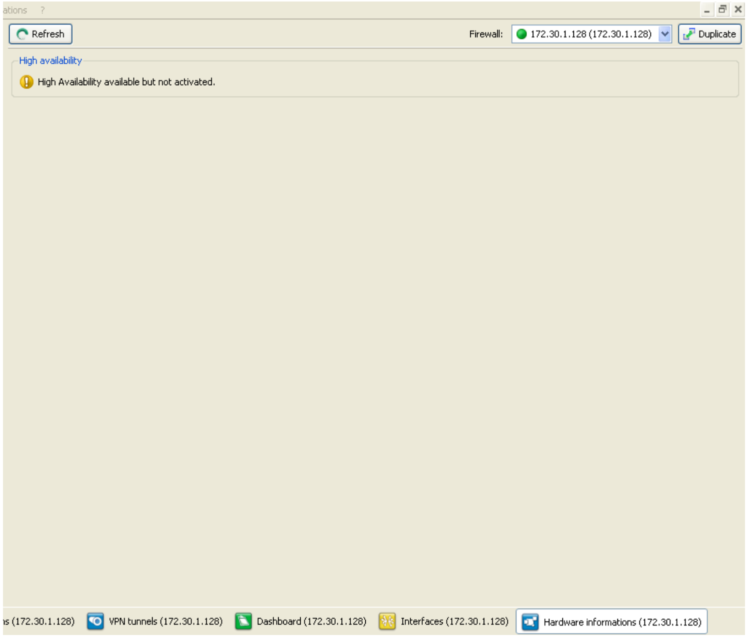
3.2.6. Hardware

DEFINITION OF “HIGH AVAILABILITY”
A specific architecture in which a backup firewall takes over when the “main” firewall breaks down while in use. This switch is totally transparent to the user.

If high availability has been activated, an additional section will provide you with the information regarding high availability (status of firewalls, licenses, synchronization).

Click on the descriptive phrase in the “Hardware” zone in order to display the **Hardware** menu and to obtain information on high availability.

If the backup firewall is not available, information on the active firewall can be viewed.



High Availability available but not activated.

Figure 28: Hardware

3.2.7. Active network policies

This view indicates whether slots are active. If so, the label of the activated rule is indicated. The rules mentioned here are:

Global filter rule	Name of the activated global filter policy.
Filter rule:	Name of the activated filter policy.
VPN rule	Name of the activated VPN rule.
NAT rule	Name of the activated translation policy.
URL filter rule	Name of the activated URL filter rule.

REMARK
<None> means that no policy has been activated for the rule that contains this indication.

3.2.8. Alarms

This view indicates the number of major and minor alarms during the past 15 minutes that the product has been connected. The maximum value indicated is 100 even if the number of alarms exceeds this value.
To view the alarms, click on either link of your choice – the **Events** menu will appear and will set out the list of alarms according to the selected criticality.

3.2.9. VPN Tunnels

This view indicates the number of configured VPN tunnels. To view a list of configured VPN tunnels, click on the link – the **`VPN Tunnels`** menu will appear.

3.2.10. Active Update

This view indicates the status of updates that have been performed (success or failure) as well as the last time the "Active Update" module had been launched (date and time). To view a list of updates and their status, click on the link – the **`Active Update`** menu will appear.

3.2.11. Logs

This window indicates whether there are problems with the logs. To view a graph that represents the current size of the log file in real time (Alarms, Authentication, Connections, Filters, Monitor, Plugins, POP3, VULNERABILITY MANAGER, Administration, SMTP, System, IPSec VPN, Web, SSL VPN) in relation to the space allocated to each log type on the firewall, click on the link. The **`Logs`** menu will appear.

3.2.12. Services

This zone indicates whether there are problems with the services. To view a list of services and their status (**Enabled/Disabled**), click on the link – the **`Services`** menu will appear.

3.2.13. Interfaces

This zone indicates whether there are problems with the interfaces. To view information on bandwidth, connections and throughput, click on the link. The **`Interfaces`** menu will appear.

3.2.14. Top 5 interfaces for incoming throughput

This zone displays the list of the 5 interfaces that have registered the most incoming throughput. Click on any one of the interfaces to display the Throughput tab graph in the **`Interfaces`** menu.

3.2.15. Top 5 interfaces for outgoing throughput

This zone displays the list of the 5 interfaces that have registered the most incoming throughput. Click on any one of the interfaces to display the Throughput tab graph in the **`Interfaces`** menu.

3.2.16. Top 5 hosts for incoming throughput

This zone displays the list of the 5 hosts that have registered the most incoming throughput. Click on any one of the interfaces to display the throughput tab graph in the **`Interfaces`** menu.

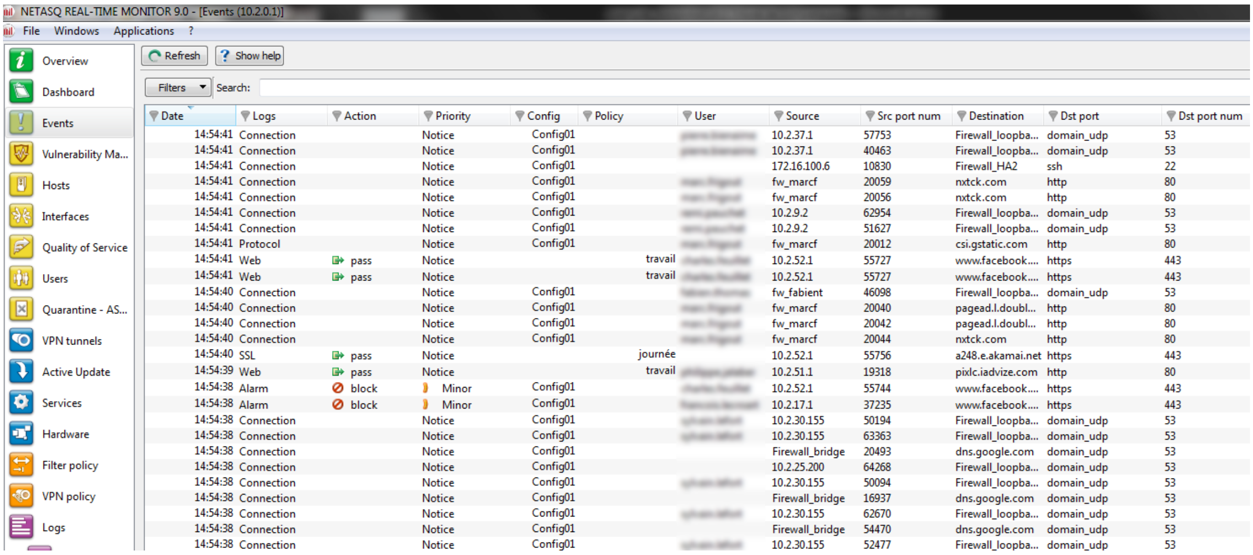
3.2.17. Top 5 hosts for outgoing throughput

This zone displays the list of the 5 hosts that have registered the most outgoing throughput. Click on any one of the interfaces to display the throughput tab graph in the **`Interfaces`** menu.

4. REAL-TIME INFORMATION

4.1. EVENTS

The alarms generated by the Firewall will appear in this window.



Date	Logs	Action	Priority	Config	Policy	User	Source	Src port num	Destination	Dst port	Dst port num
14:54:41	Connection		Notice	Config01		[redacted]	10.2.37.1	57753	Firewall_loopba...	domain_udp	53
14:54:41	Connection		Notice	Config01		[redacted]	10.2.37.1	40463	Firewall_loopba...	domain_udp	53
14:54:41	Connection		Notice	Config01			172.16.100.6	10830	Firewall_HA2	ssh	22
14:54:41	Connection		Notice	Config01		[redacted]	fw_marcf	20059	nxtck.com	http	80
14:54:41	Connection		Notice	Config01		[redacted]	fw_marcf	20056	nxtck.com	http	80
14:54:41	Connection		Notice	Config01		[redacted]	10.2.9.2	62954	Firewall_loopba...	domain_udp	53
14:54:41	Connection		Notice	Config01		[redacted]	10.2.9.2	51627	Firewall_loopba...	domain_udp	53
14:54:41	Protocol		Notice	Config01		[redacted]	fw_marcf	20012	csi.gstatic.com	http	80
14:54:41	Web	pass	Notice		travail	[redacted]	10.2.52.1	55727	www.facebook....	https	443
14:54:41	Web	pass	Notice		travail	[redacted]	10.2.52.1	55727	www.facebook....	https	443
14:54:40	Connection		Notice	Config01		[redacted]	fw_fabient	46098	Firewall_loopba...	domain_udp	53
14:54:40	Connection		Notice	Config01		[redacted]	fw_marcf	20040	pagead.l.doubl...	http	80
14:54:40	Connection		Notice	Config01		[redacted]	fw_marcf	20042	pagead.l.doubl...	http	80
14:54:40	Connection		Notice	Config01		[redacted]	fw_marcf	20044	nxtck.com	http	80
14:54:40	SSL	pass	Notice		journée		10.2.52.1	55756	a248.e.akamai.net	https	443
14:54:39	Web	pass	Notice		travail	[redacted]	10.2.51.1	19318	pixlc.iadvize.com	http	80
14:54:38	Alarm	block	Minor	Config01		[redacted]	10.2.52.1	55744	www.facebook....	https	443
14:54:38	Alarm	block	Minor	Config01		[redacted]	10.2.17.1	37235	www.facebook....	https	443
14:54:38	Connection		Notice	Config01		[redacted]	10.2.30.155	50194	Firewall_loopba...	domain_udp	53
14:54:38	Connection		Notice	Config01		[redacted]	10.2.30.155	63363	Firewall_loopba...	domain_udp	53
14:54:38	Connection		Notice	Config01			Firewall_bridge	20493	dns.google.com	domain_udp	53
14:54:38	Connection		Notice	Config01			10.2.25.200	64268	Firewall_loopba...	domain_udp	53
14:54:38	Connection		Notice	Config01		[redacted]	10.2.30.155	50094	Firewall_loopba...	domain_udp	53
14:54:38	Connection		Notice	Config01			Firewall_bridge	16937	dns.google.com	domain_udp	53
14:54:38	Connection		Notice	Config01		[redacted]	10.2.30.155	62670	Firewall_loopba...	domain_udp	53
14:54:38	Connection		Notice	Config01			Firewall_bridge	54470	dns.google.com	domain_udp	53
14:54:38	Connection		Notice	Config01		[redacted]	10.2.30.155	52477	Firewall_loopba...	domain_udp	53

Figure 29: Events

When the **Events** menu in the menu directory is selected, the data displayed by default are:

Date (time)	Date and time the line was recorded in the log file at the firewall's local time.
Logs	Indicates the type of logs (the possible types of logs are: Alarm, Plugin, Connection, Web, SMTP, FTP, POP3, Filter).
Action (action)	Action associated with the filter rule and applied on the packet (**Examples**: Block/Pass…)
Priority (pri)	Determines the alarm level. The possible values are: - 0: emergency - 1: alert - 2: critical - 3: error - 4: warning - 5: notice - 6: information - 7: debug
Config	Number of the filtering policy involved in the rise of the event.
Policy	Category of the event raised. Example: "travail" means that the packet comes from the working session of a user on the network.
User	Identifier for the authenticated user (ftp), e-mail address of the sender (SMTP), identifier for the user if authentication has been enabled (WEB).
Source	IP address or name of the object corresponding to the source host of the packet that set off the alarm.
Src prt num	Source port number involved, displayed in digital.
Destination	IP address or name of the object corresponding to the destination host of the packet that set off the alarm.

Dst port	Destination port number of the service or name of the object corresponding to the service port of the destination host if it exists and is requested for this connection.
Details	Description of the event relating to the log. This column groups some of the information gathered from the other columns. *E.g.: if an alarm log is concerned, information such as whether it was a sensitive alarm, the number of the filter rule, rule ID (already given in the columns "Sensitive alarm", "Rule" and "Rule ID") will be grouped in this column.* *Please refer to **appendix G.***

Other available data are:

Firewall (fw)	Serial number or name of the firewall (if known) that caused the event.
UTC Date (time+tz)	UTC date (replaces the GMT)
Start date (starttime)	“Local” date at the start of an event.
UTC start date (startime+tz)	UTC date at the start of an event (a connection).
Timezone (tz)	Firewall’s timezone.
Rule (ruleid)	Number of the filter rule involved in the raised alarm.
Protocol (proto)	Protocol of the packet that set off the alarm.
Connection group (groupid)	Identifier that would allow tracking child connections.
Source interface (srcif/srcifname)	Name of the firewall interface on which the event was raised (source interface network card).
Source address (src)	IP address of the source host of the packet that set off the event.
Source port (srcport/srcportname)	Source port number of the service or the name of the object corresponding to the service port of the source host (only if TCP/UDP).
Destination interface (dstif/dstifname)	Network card of the destination interface.
Destination address (dst)	IP address of the destination host of the packet that set off the event.
Sensitive alarm (sensitive)	Indicates whether an alarm is sensitive. This alarm is raised whenever the intrusion prevention system detects a sensitive packet and for which it has been configured in intrusion detection mode. If the alarm is sensitive, an icon in the form of an exclamation mark followed by “Yes” will appear. Otherwise, “No” will be indicated. When the alarm is blocked, the icon will be grayed out (it is disabled). ℹ **NOTE:** Only protocol alarms can be described as “sensitive”. For alarms that are not in this class, the column will be empty.
Copy (repeat)	Indicates the number of an event’s occurrences within a defined period. This period is configured in NETASQ UNIFIED MANAGER in the menu “`Logs\Advanced`”, option **Write log duplicates every**.
Identifier (Id/alarmid)	Indicates the number of the alarm.
Context (class)	Text indicating the category to which the alarm belongs (system, protocol, filter, etc).
Alarm type (classification)	Code (number) indicating the alarm category.
Caller	VoIP: Indicates the caller
Callee	VoIP: Indicates the callee
Duration	Connection time in seconds.
Sent	Number of KB sent during the connection.
Received (rcvd)	Number of KB received during the connection.

Operation (op)	Identified command of the protocol. - FTP: PUT, MPUT, GET, DELETE,… - HTTP: GET, PUT, POST,… - EDONKEY: SENDPART - POP3: RETR, LIST,… - FTP: DELETE, LIST,…
Result	Result of the operation in the protocol (example: 404 which indicates an error).
Parameter (arg)	Operation parameter.
Category (cat_site)	Web category of the requested website.
Spam level (spamlevel)	Spam level: 0 (Message not spam) 1,2 and 3 (spam) x (error during the treatment of the message) and ? (the nature of the message could not be determined) if antispam has been enabled.
Virus (virus)	Indicates whether there is a virus (if the antivirus has been enabled).
IP (ipproto)	Internet protocol (tcp or udp).
Media)	Type of traffic detected (audio, video, application,…)
Message (Msg)	Detailed description of the alarm. All commands sent by the client are found here. Sensitive information such as passwords is removed.
ICMP code (icmpcode)	ICMP code in the alarm logs.
ICMP type (icmptype)	ICMP type in the alarm logs.
Packet	Indicates the IP packet for which the alarm was raised. Right-clicking on this packet allows it to be viewed through a packet analyzer. The information displayed in this column shows the size of the IPv4 packets (value beginning with 45). Packet sizes vary according to the firewall model. - S 64 bytes: U30 to U70. - M 128 bytes: U120 to U450 - L 1500 bytes: U1100 to U1500 and NG1000-A - XL 1500 bytes: U6000, NG5000-A **WARNING** To view a packet, a software program needs to be installed on your workstation.

NOTE

The logs will now be displayed for models without hard drive.

4.2. VULNERABILITY MANAGER

4.2.1. Introduction

NETASQ VULNERABILITY MANAGER is a module that allows network administrators to gather information in real time and to analyze it in order to spot possible vulnerabilities that may compromise the security of their networks. Among other things, it also allows raising alarms generated by ASQ and thus to maintain an optimal security policy.

NETASQ VULNERABILITY MANAGER collects and archives in particular, information relating to the operating system, to various active services as well as to the different applications that have been installed. As a result, descriptive profiles can be made of network elements.

The following are **NETASQ VULNERABILITY MANAGER**'s aims:

- To configure your company network's security policy
- To analyze the status of the risk
- To optimize the level of security
- To report security events

The procedure is as follows:

1. NETASQ's intrusion prevention engine (ASQ) extracts data in real time using network protocols that it knows.
2. VULNERABILITY MANAGER then combines and weights these data.
3. The vulnerability found can then be treated using databases that have been indexed dynamically. Once all this information has been collected, they will be used in Monitor so that flaws on the network can be corrected, or prohibited software can be detected, or the real risk relating to the attack can be identified in real time.
4. The profile is therefore complete.
5. One or several solutions can thus be considered.

> **Example**
> A company has a public website that it updates twice a month via FTP. At a specific date and time, a vulnerability that affects FTP servers is raised and Monitor immediately takes it into account, enabling the network administrator to detect it at practically the same time.
> This vulnerability is represented by a line that indicates the number of affected hosts and whether a solution is available.
> By deploying this line, details of the hosts concerned will appear, as well as the service that has been affected by the vulnerability. Help, in the form of links, may be suggested to correct the detected flaw.

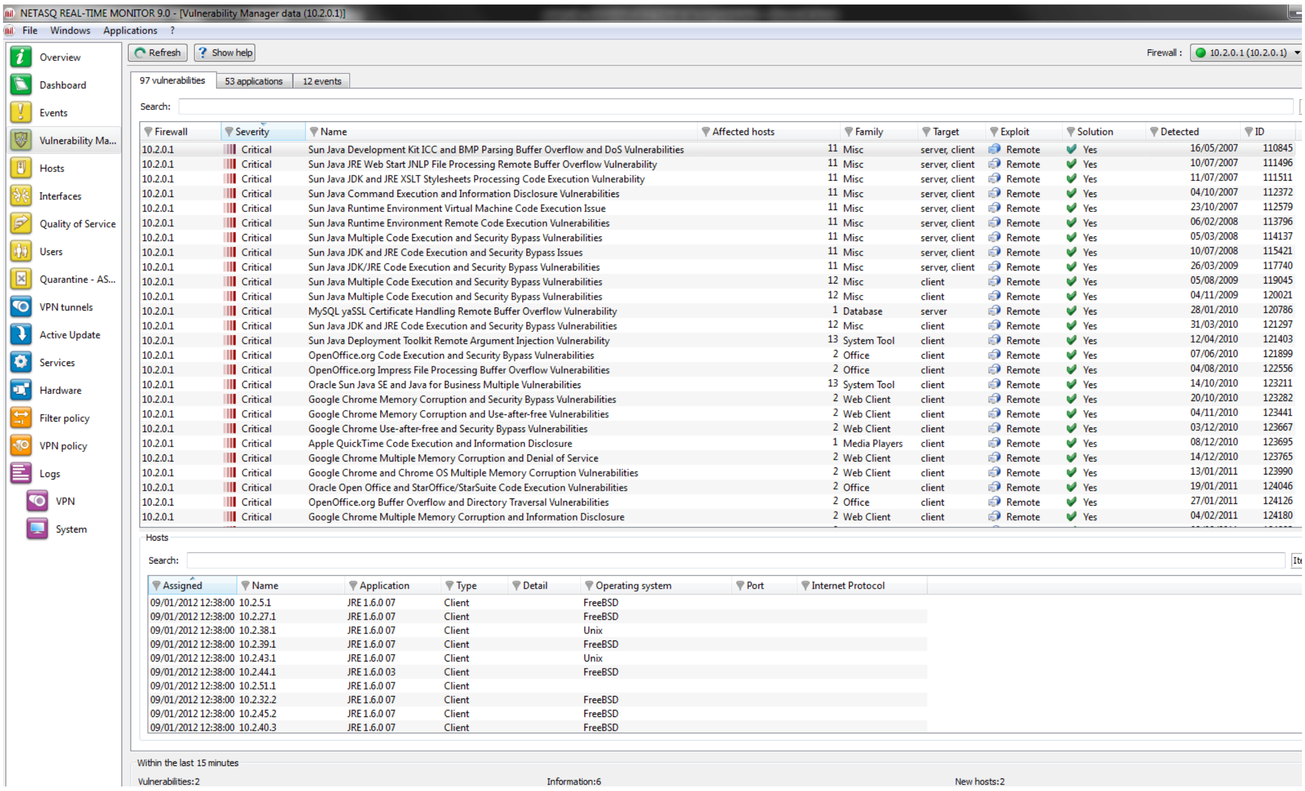
Once the network administrator becomes aware of the vulnerability, he can correct it at any moment, quarantine the affected host(s) and generate a report.

VULNERABILITY MANAGER can also perform weekly, monthly or yearly analyses, using the application **NETASQ EVENT REPORTER** (Autoreport). (*See the **NETASQ EVENT REPORTER** user guide.*)

When you click on the VULNERABILITY MANAGER menu in the menu directory, the scan window will consist of the following

- A Vulnerabilities tab
- An Applications tab
- An Events tab

4.2.2. Vulnerabilities tab



Firewall	Severity	Name	Affected hosts	Family	Target	Exploit	Solution	Detected	ID
10.2.0.1	Critical	Sun Java Development Kit ICC and BMP Parsing Buffer Overflow and DoS Vulnerabilities	11	Misc	server, client	Remote	✓ Yes	16/05/2007	110845
10.2.0.1	Critical	Sun Java JRE Web Start JNLP File Processing Remote Buffer Overflow Vulnerability	11	Misc	server, client	Remote	✓ Yes	10/07/2007	111496
10.2.0.1	Critical	Sun Java JDK and JRE XSLT Stylesheets Processing Code Execution Vulnerability	11	Misc	server, client	Remote	✓ Yes	11/07/2007	111511
10.2.0.1	Critical	Sun Java Command Execution and Information Disclosure Vulnerabilities	11	Misc	server, client	Remote	✓ Yes	04/10/2007	112372
10.2.0.1	Critical	Sun Java Runtime Environment Virtual Machine Code Execution Issue	11	Misc	server, client	Remote	✓ Yes	23/10/2007	112579
10.2.0.1	Critical	Sun Java Runtime Environment Remote Code Execution Vulnerabilities	11	Misc	server, client	Remote	✓ Yes	06/02/2008	113796
10.2.0.1	Critical	Sun Java Multiple Code Execution and Security Bypass Vulnerabilities	11	Misc	server, client	Remote	✓ Yes	05/03/2008	114137
10.2.0.1	Critical	Sun Java JDK and JRE Code Execution and Security Bypass Issues	11	Misc	server, client	Remote	✓ Yes	10/07/2008	115421
10.2.0.1	Critical	Sun Java JDK/JRE Code Execution and Security Bypass Vulnerabilities	11	Misc	server, client	Remote	✓ Yes	26/03/2009	117740
10.2.0.1	Critical	Sun Java Multiple Code Execution and Security Bypass Vulnerabilities	12	Misc	client	Remote	✓ Yes	05/08/2009	119045
10.2.0.1	Critical	Sun Java Multiple Code Execution and Security Bypass Vulnerabilities	12	Misc	client	Remote	✓ Yes	04/11/2009	120021
10.2.0.1	Critical	MySQL yaSSL Certificate Handling Remote Buffer Overflow Vulnerability	1	Database	server	Remote	✓ Yes	28/01/2010	120786
10.2.0.1	Critical	Sun Java JDK and JRE Code Execution and Security Bypass Vulnerabilities	12	Misc	client	Remote	✓ Yes	31/03/2010	121297
10.2.0.1	Critical	Sun Java Deployment Toolkit Remote Argument Injection Vulnerability	13	System Tool	client	Remote	✓ Yes	12/04/2010	121403
10.2.0.1	Critical	OpenOffice.org Code Execution and Security Bypass Vulnerabilities	2	Office	client	Remote	✓ Yes	07/06/2010	121899
10.2.0.1	Critical	OpenOffice.org Impress File Processing Buffer Overflow Vulnerabilities	2	Office	client	Remote	✓ Yes	04/08/2010	122556
10.2.0.1	Critical	Oracle Sun Java SE and Java for Business Multiple Vulnerabilities	13	System Tool	client	Remote	✓ Yes	14/10/2010	123211
10.2.0.1	Critical	Google Chrome Memory Corruption and Security Bypass Vulnerabilities	2	Web Client	client	Remote	✓ Yes	20/10/2010	123282
10.2.0.1	Critical	Google Chrome Memory Corruption and Use-after-free Vulnerabilities	2	Web Client	client	Remote	✓ Yes	04/11/2010	123441
10.2.0.1	Critical	Google Chrome Use-after-free and Security Bypass Vulnerabilities	2	Web Client	client	Remote	✓ Yes	03/12/2010	123667
10.2.0.1	Critical	Apple QuickTime Code Execution and Information Disclosure	1	Media Players	client	Remote	✓ Yes	08/12/2010	123695
10.2.0.1	Critical	Google Chrome Multiple Memory Corruption and Denial of Service	2	Web Client	client	Remote	✓ Yes	14/12/2010	123765
10.2.0.1	Critical	Google Chrome and Chrome OS Multiple Memory Corruption Vulnerabilities	2	Web Client	client	Remote	✓ Yes	13/01/2011	123990
10.2.0.1	Critical	Oracle Open Office and StarOffice/StarSuite Code Execution Vulnerabilities	2	Office	client	Remote	✓ Yes	19/01/2011	124046
10.2.0.1	Critical	OpenOffice.org Buffer Overflow and Directory Traversal Vulnerabilities	2	Office	client	Remote	✓ Yes	27/01/2011	124126
10.2.0.1	Critical	Google Chrome Multiple Memory Corruption and Information Disclosure	2	Web Client	client	Remote	✓ Yes	04/02/2011	124180

Hosts

Search:

Assigned	Name	Application	Type	Detail	Operating system	Port	Internet Protocol
09/01/2012 12:38:00	10.2.5.1	JRE 1.6.0 07	Client		FreeBSD		
09/01/2012 12:38:00	10.2.27.1	JRE 1.6.0 07	Client		FreeBSD		
09/01/2012 12:38:00	10.2.38.1	JRE 1.6.0 07	Client		Unix		
09/01/2012 12:38:00	10.2.39.1	JRE 1.6.0 07	Client		FreeBSD		
09/01/2012 12:38:00	10.2.43.1	JRE 1.6.0 07	Client		Unix		
09/01/2012 12:38:00	10.2.44.1	JRE 1.6.0 03	Client		FreeBSD		
09/01/2012 12:38:00	10.2.51.1	JRE 1.6.0 07	Client				
09/01/2012 12:38:00	10.2.32.2	JRE 1.6.0 07	Client		FreeBSD		
09/01/2012 12:38:00	10.2.45.2	JRE 1.6.0 07	Client		FreeBSD		
09/01/2012 12:38:00	10.2.40.3	JRE 1.6.0 07	Client		FreeBSD		

Within the last 15 minutes

Vulnerabilities:2 Information:6 New hosts:2

Figure 30: VULNERABILITY MANAGER

The window has 3 views:

- A view of the list of vulnerabilities
- A view of the list of hosts affected by this vulnerability
- A view allowing the resolution of the selected vulnerability if a solution exists

4.2.2.1. “Vulnerability(ies)” view

This view allows you to view all the vulnerabilities that the firewall has detected. Each line represents a vulnerability.

REMARK

The number of vulnerabilities is displayed in the tab’s label.

The information provided in the “vulnerability” view is as follows:

Firewall	Serial number or name (if known) of the firewall at the source of the vulnerability.
Severity	Indicates the how severely the host(s) have/has been affected by the vulnerability, according to 4 levels: **Low**, **Moderate**, **High**, **Critical**.
Name	Indicates the name of the vulnerability.
Affected hosts	Number of hosts affected by the vulnerability.
Family	Family to which the vulnerability belongs. (See ***Appendix D: Sessions and user privileges***).
Target	One of 2 targets: **Client** or **Server**.
Exploit	Local or remote access (via the network). Allows exploiting the vulnerability.
Solution	Indicates whether a solution has been suggested.
Release	Date on which the vulnerability was discovered. **WARNING** This refers to the date on which the vulnerability was discovered and not the date on which it appeared on the network.
ID	Allows a unique identification of the vulnerability.

4.2.2.2. “Hosts” view

This view allows you to view all the vulnerabilities for a given host. Each line represents a host.

The information provided in the “Hosts” view is as follows:

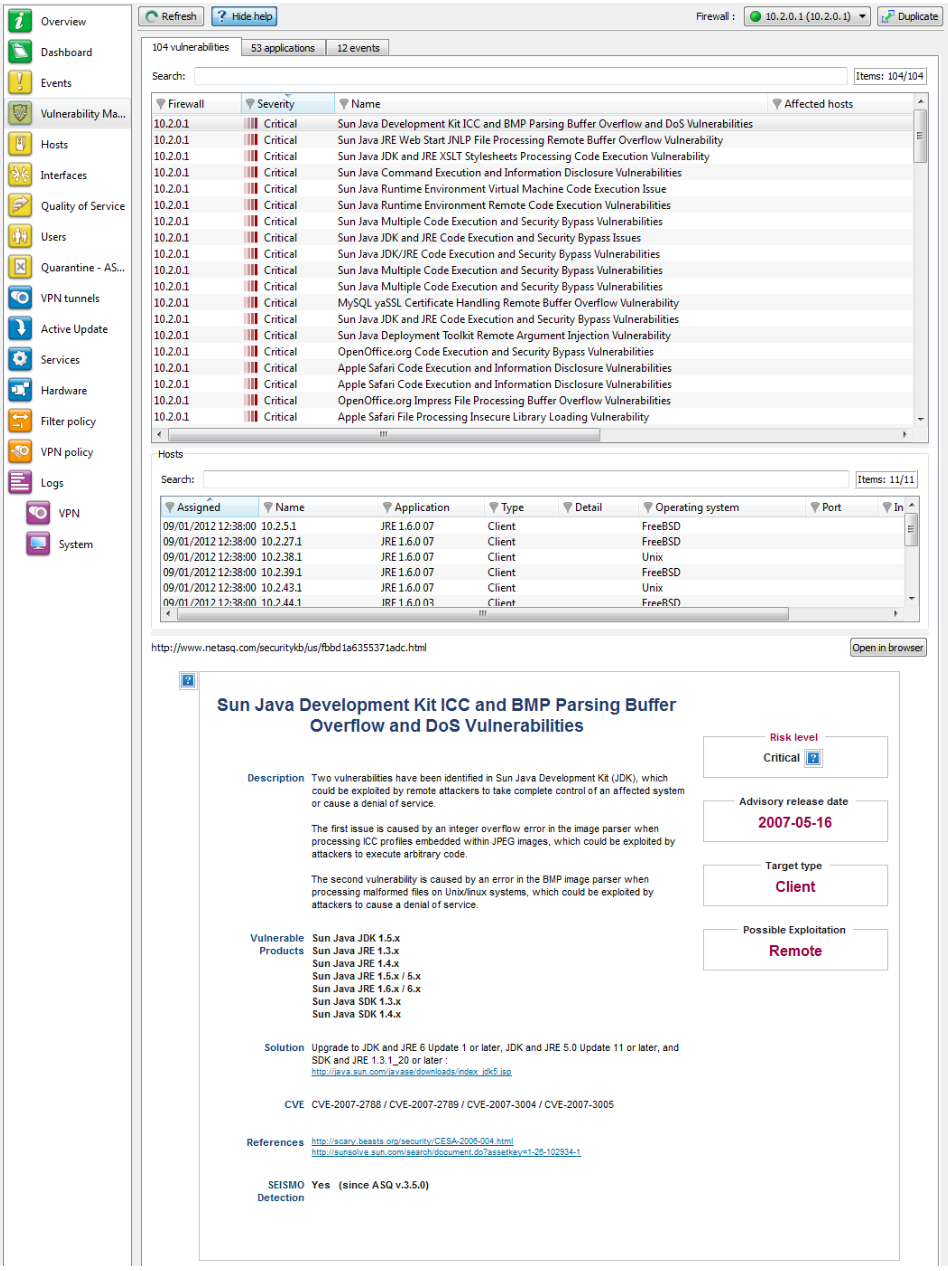
Affected	Date on which the host was affected.
Name	Name of the host affected by the attack (if it exists).
Address	IP address of the host affected by the attack.
Application	Name and version of the application (if available).
Type	Application type (Client/Server/Operating system).
Detail	Name of the service prone to being affected by the vulnerability.
Operating system	OS used.
Port	Number of the port on which the vulnerability had been detected.
Protocol	Name of the protocol used.

4.2.2.3. Help zone

The help zone allows you to get more details relating to the attack. Thus the administrator can correct the vulnerability.

Click on the **Show help** button to show or hide the help zone associated with a vulnerability.

Typically, help comes in the form of a descriptive file that contains explanations, links to the publisher’s site or to bug fixes, and the possibility of quarantining the affected host.



Search: Items: 104/104

Firewall	Severity	Name	Affected hosts
10.2.0.1	Critical	Sun Java Development Kit ICC and BMP Parsing Buffer Overflow and DoS Vulnerabilities	
10.2.0.1	Critical	Sun Java JRE Web Start JNLP File Processing Remote Buffer Overflow Vulnerability	
10.2.0.1	Critical	Sun Java JDK and JRE XSLT Stylesheets Processing Code Execution Vulnerability	
10.2.0.1	Critical	Sun Java Command Execution and Information Disclosure Vulnerabilities	
10.2.0.1	Critical	Sun Java Runtime Environment Virtual Machine Code Execution Issue	
10.2.0.1	Critical	Sun Java Runtime Environment Remote Code Execution Vulnerabilities	
10.2.0.1	Critical	Sun Java Multiple Code Execution and Security Bypass Vulnerabilities	
10.2.0.1	Critical	Sun Java JDK and JRE Code Execution and Security Bypass Issues	
10.2.0.1	Critical	Sun Java JDK/JRE Code Execution and Security Bypass Vulnerabilities	
10.2.0.1	Critical	Sun Java Multiple Code Execution and Security Bypass Vulnerabilities	
10.2.0.1	Critical	Sun Java Multiple Code Execution and Security Bypass Vulnerabilities	
10.2.0.1	Critical	MySQL yaSSL Certificate Handling Remote Buffer Overflow Vulnerability	
10.2.0.1	Critical	Sun Java JDK and JRE Code Execution and Security Bypass Vulnerabilities	
10.2.0.1	Critical	Sun Java Deployment Toolkit Remote Argument Injection Vulnerability	
10.2.0.1	Critical	OpenOffice.org Code Execution and Security Bypass Vulnerabilities	
10.2.0.1	Critical	Apple Safari Code Execution and Information Disclosure Vulnerabilities	
10.2.0.1	Critical	Apple Safari Code Execution and Information Disclosure Vulnerabilities	
10.2.0.1	Critical	OpenOffice.org Impress File Processing Buffer Overflow Vulnerabilities	
10.2.0.1	Critical	Apple Safari File Processing Insecure Library Loading Vulnerability	

Hosts

Search: Items: 11/11

Assigned	Name	Application	Type	Detail	Operating system	Port	In
09/01/2012 12:38:00	10.2.5.1	JRE 1.6.0 07	Client		FreeBSD		
09/01/2012 12:38:00	10.2.27.1	JRE 1.6.0 07	Client		FreeBSD		
09/01/2012 12:38:00	10.2.38.1	JRE 1.6.0 07	Client		Unix		
09/01/2012 12:38:00	10.2.39.1	JRE 1.6.0 07	Client		FreeBSD		
09/01/2012 12:38:00	10.2.43.1	JRE 1.6.0 07	Client		Unix		
09/01/2012 12:38:00	10.2.44.1	JRE 1.6.0 03	Client		FreeBSD		

http://www.netasq.com/securitykb/us/fbbd1a6355371adc.html

Sun Java Development Kit ICC and BMP Parsing Buffer Overflow and DoS Vulnerabilities

Risk level: Critical

Advisory release date: 2007-05-16

Target type: Client

Possible Exploitation: Remote

Description Two vulnerabilities have been identified in Sun Java Development Kit (JDK), which could be exploited by remote attackers to take complete control of an affected system or cause a denial of service.

The first issue is caused by an integer overflow error in the image parser when processing ICC profiles embedded within JPEG images, which could be exploited by attackers to execute arbitrary code.

The second vulnerability is caused by an error in the BMP image parser when processing malformed files on Unix/linux systems, which could be exploited by attackers to cause a denial of service.

Vulnerable Products
Sun Java JDK 1.5.x
Sun Java JRE 1.3.x
Sun Java JRE 1.4.x
Sun Java JRE 1.5.x / 5.x
Sun Java JRE 1.6.x / 6.x
Sun Java SDK 1.3.x
Sun Java SDK 1.4.x

Solution Upgrade to JDK and JRE 6 Update 1 or later, JDK and JRE 5.0 Update 11 or later, and SDK and JRE 1.3.1_20 or later :
http://java.sun.com/javase/downloads/index_jdk5.jsp

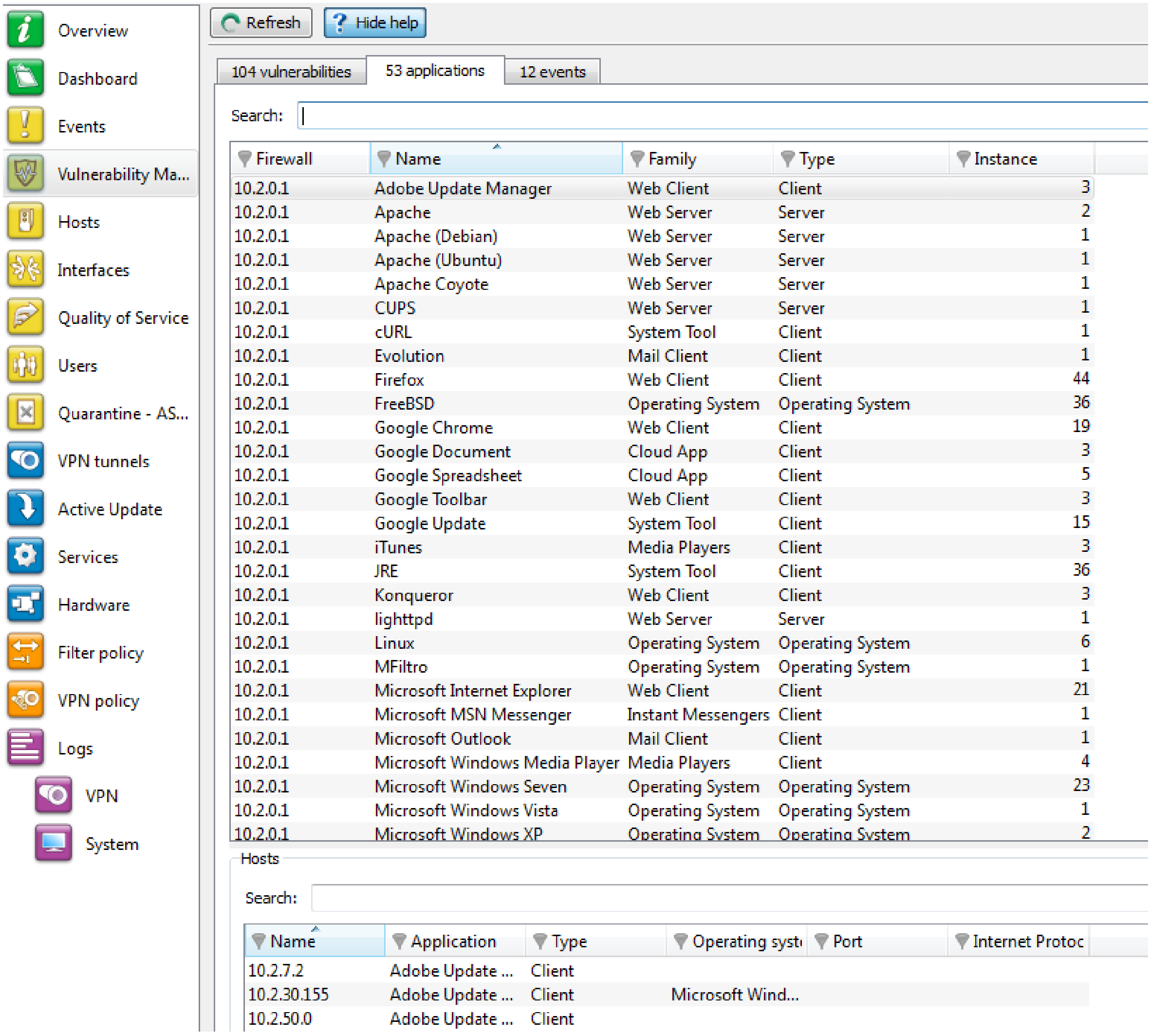
CVE CVE-2007-2788 / CVE-2007-2789 / CVE-2007-3004 / CVE-2007-3005

References http://scary.beasts.org/security/CESA-2006-004.html
http://sunsolve.sun.com/search/document.do?assetkey=1-26-102934-1

SEISMO Detection Yes (since ASQ v.3.5.0)

Figure 31: Help

4.2.3. Application tab



Search: |

Firewall	Name	Family	Type	Instance
10.2.0.1	Adobe Update Manager	Web Client	Client	3
10.2.0.1	Apache	Web Server	Server	2
10.2.0.1	Apache (Debian)	Web Server	Server	1
10.2.0.1	Apache (Ubuntu)	Web Server	Server	1
10.2.0.1	Apache Coyote	Web Server	Server	1
10.2.0.1	CUPS	Web Server	Server	1
10.2.0.1	cURL	System Tool	Client	1
10.2.0.1	Evolution	Mail Client	Client	1
10.2.0.1	Firefox	Web Client	Client	44
10.2.0.1	FreeBSD	Operating System	Operating System	36
10.2.0.1	Google Chrome	Web Client	Client	19
10.2.0.1	Google Document	Cloud App	Client	3
10.2.0.1	Google Spreadsheet	Cloud App	Client	5
10.2.0.1	Google Toolbar	Web Client	Client	3
10.2.0.1	Google Update	System Tool	Client	15
10.2.0.1	iTunes	Media Players	Client	3
10.2.0.1	JRE	System Tool	Client	36
10.2.0.1	Konqueror	Web Client	Client	3
10.2.0.1	lighttpd	Web Server	Server	1
10.2.0.1	Linux	Operating System	Operating System	6
10.2.0.1	MFiltro	Operating System	Operating System	1
10.2.0.1	Microsoft Internet Explorer	Web Client	Client	21
10.2.0.1	Microsoft MSN Messenger	Instant Messengers	Client	1
10.2.0.1	Microsoft Outlook	Mail Client	Client	1
10.2.0.1	Microsoft Windows Media Player	Media Players	Client	4
10.2.0.1	Microsoft Windows Seven	Operating System	Operating System	23
10.2.0.1	Microsoft Windows Vista	Operating System	Operating System	1
10.2.0.1	Microsoft Windows XP	Operating System	Operating System	2

Hosts

Search:

Name	Application	Type	Operating syst	Port	Internet Protoc
10.2.7.2	Adobe Update ...	Client			
10.2.30.155	Adobe Update ...	Client	Microsoft Wind...		
10.2.50.0	Adobe Update ...	Client			

Figure 32: VULNERABILITY MANAGER - Application

The `Applications` tab provides information on the application detected within the enterprise.

Two types of application may be detected:

- **Products**: these are client applications installed on the host (e.g.: Firefox 1.5).
- **Services**: these are server applications that are attached to a port (e.g.: OpenSSH 3.5).

Using information detected by the ASQ engine, NETASQ VULNERABILITY MANAGER generates information about the detected applications. The addition of this feature allows grouping applications by family, so by pairing such information with the vulnerability database, NETASQ VULNERABILITY MANAGER also suggests probable security loopholes linked to these applications.

This tab offers features that include filtering, optional column display, resizing to fit contents and copying of data to the clipboard. It displays information on the detected applications through the columns that can be seen in the window above.

The window comprises 2 views:

- A view that lists the applications
- A detailed view that lists the hosts

4.2.3.1. “Application(s)” view

This view allows you to see the applications that the firewall detects. Each line represents an application.

REMARK

The number of applications is displayed in the tab’s label.

The **`Applications`** tab displays the following data:

Firewall	Serial number or name (if known) of the firewall.
Name	Name of the software application. The version is not specified except for the operating systems.
Family	The software application’s family (e.g.: “web client”).
Type	Software type (Client: the software does not provide any service – Server: the software application provides a service – Operating system).
Instance	Number of software applications detected in the monitored networks. For a server, the same service may be suggested on several ports. E.g.: an Apache http server which provides its services on port 80 and port 8080 (web proxy) would appear twice.

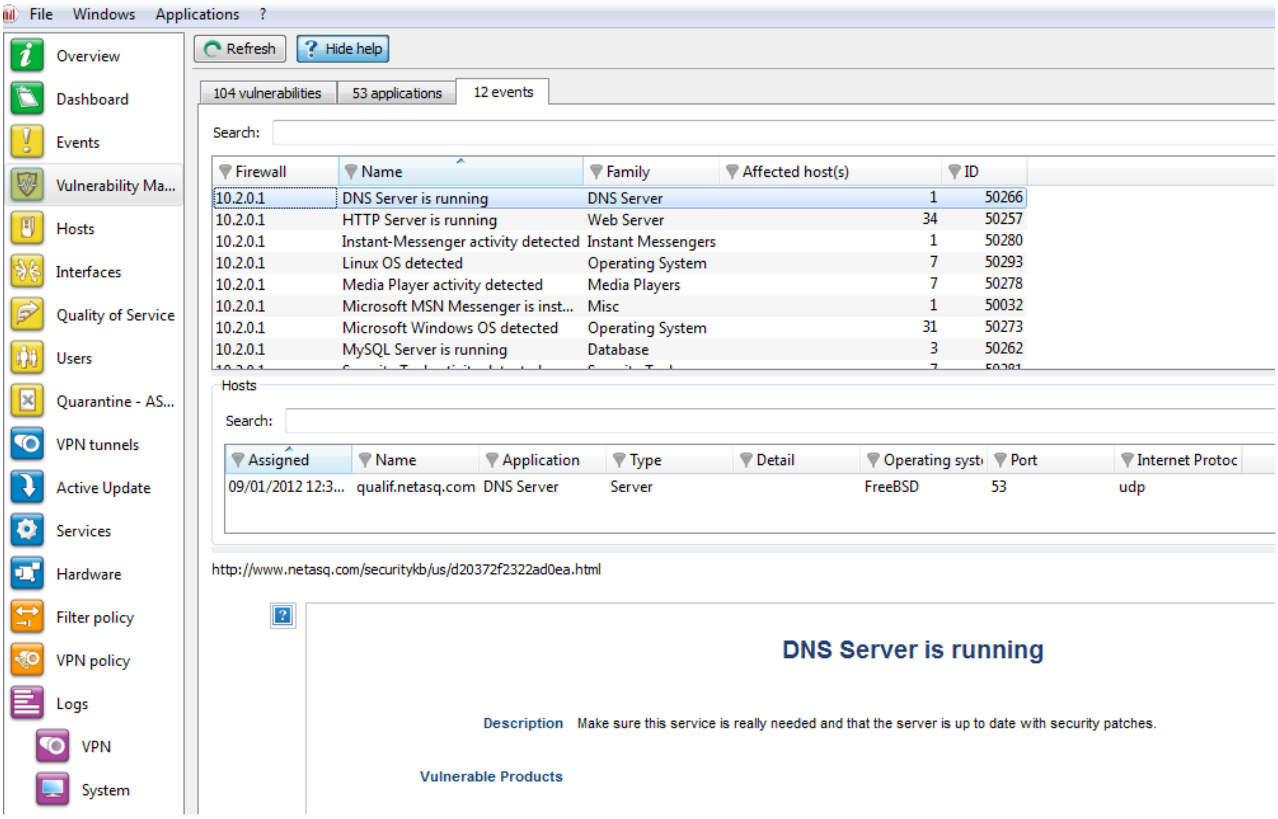
4.2.3.2. “Hosts” view

This view allows you to see all the applications for a given host. Each line represents a host.

The information seen in the “Hosts” view is as follows:

Name	Host name
IP address	IP address of the host
Application	Name of the software as well as its version, if available.
Type	Software type (Client: the software does not provide any service – Server: the software application provides a service – Operating system).
Operating system	Host’s operating system.
Port	Port that the software application uses (if it uses any).
Protocol	Internet protocol of the software (if it uses any).

4.2.4. Events tab



Search:

Firewall	Name	Family	Affected host(s)	ID
10.2.0.1	DNS Server is running	DNS Server	1	50266
10.2.0.1	HTTP Server is running	Web Server	34	50257
10.2.0.1	Instant-Messenger activity detected	Instant Messengers	1	50280
10.2.0.1	Linux OS detected	Operating System	7	50293
10.2.0.1	Media Player activity detected	Media Players	7	50278
10.2.0.1	Microsoft MSN Messenger is inst...	Misc	1	50032
10.2.0.1	Microsoft Windows OS detected	Operating System	31	50273
10.2.0.1	MySQL Server is running	Database	3	50262

Hosts

Search:

Assigned	Name	Application	Type	Detail	Operating syst	Port	Internet Protoc
09/01/2012 12:3...	qualif.netasq.com	DNS Server	Server		FreeBSD	53	udp

http://www.netasq.com/securitykb/us/d20372f2322ad0ea.html

DNS Server is running

Description Make sure this service is really needed and that the server is up to date with security patches.

Vulnerable Products

Figure 33: VULNERABILITY MANAGER-Events

The **Information** tab informs you of your network's activity. You can therefore see the programs that are at risk of generating attacks.

The window is divided into 3 sections:

- List of programs
- List of hosts
- Help zone

4.2.4.1. “Information” view

This view allows you to see all the events that the firewall detects. Each line represents an event.

REMARK

The number of events is displayed in the tab’s label.

The “Information” view displays the following data:

Firewall	Serial number or name (if known) of the firewall.
Name	Name of the detected OS or a server (e.g.: SSH server).
Family	Host family. **Example** SSH
Affected hosts	Number of hosts affected. These hosts are identified in the **Hosts** view in this tab. **REMARK** The number of hosts indicated in the column "Affected hosts" is not always the same as the number of elements indicated in the "Hosts" zone in this window. In fact, the same service may use several ports. For example, the service thhtpd_server_2.25b can listen to 2 different ports, thus increasing the number of elements.
Id	Identifier.

4.2.4.2. “Hosts” view

This view allows you to see all the events for a given host. Each line represents a host.

The information seen in the “Hosts” view is as follows:

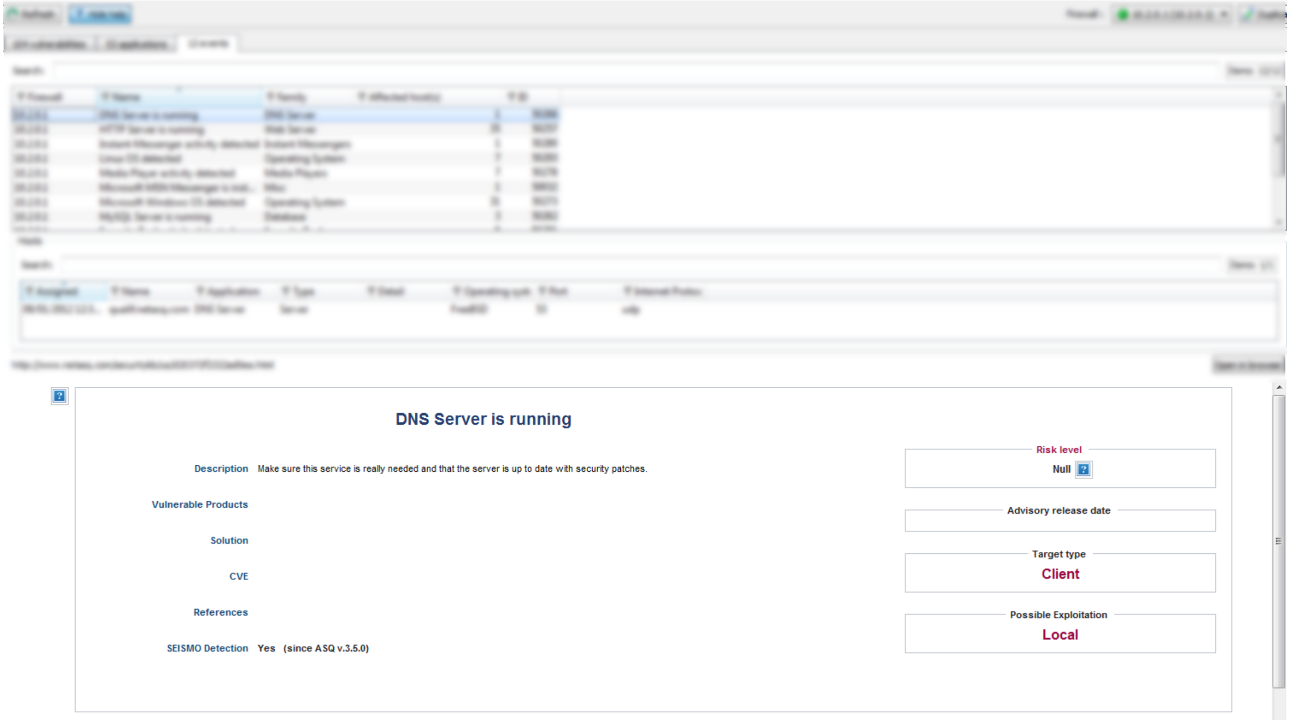
Assigned	Date and time of the event’s occurrence.
Name	Host name.
Address	IP address of the host
Application	Name of the software as well as its version, if available.
Type	Software type (Client: the software does not provide any service – Server: the software application provides a service – Operating system).
Detail	Details about the operating system.
Operating system	Host’s operating system.
Port	Port that the software application uses (if it uses any).
Internet Protocol	Internet protocol of the software (if it uses any).

4.2.4.3. Help zone

The help zone allows you to get more details relating to the attack. Thus the administrator can correct the vulnerability.

Click on the **Show help** button to show or hide the help zone associated with an event.

Typically, help comes in the form of a descriptive file that contains explanations, links to the publisher’s site or to bug fixes, and the possibility of quarantining the affected host.



DNS Server is running

Description Make sure this service is really needed and that the server is up to date with security patches.

Vulnerable Products

Solution

CVE

References

SEISMO Detection Yes (since ASQ v.3.5.0)

Risk level: Null

Advisory release date

Target type: Client

Possible Exploitation: Local

Figure 34: Help

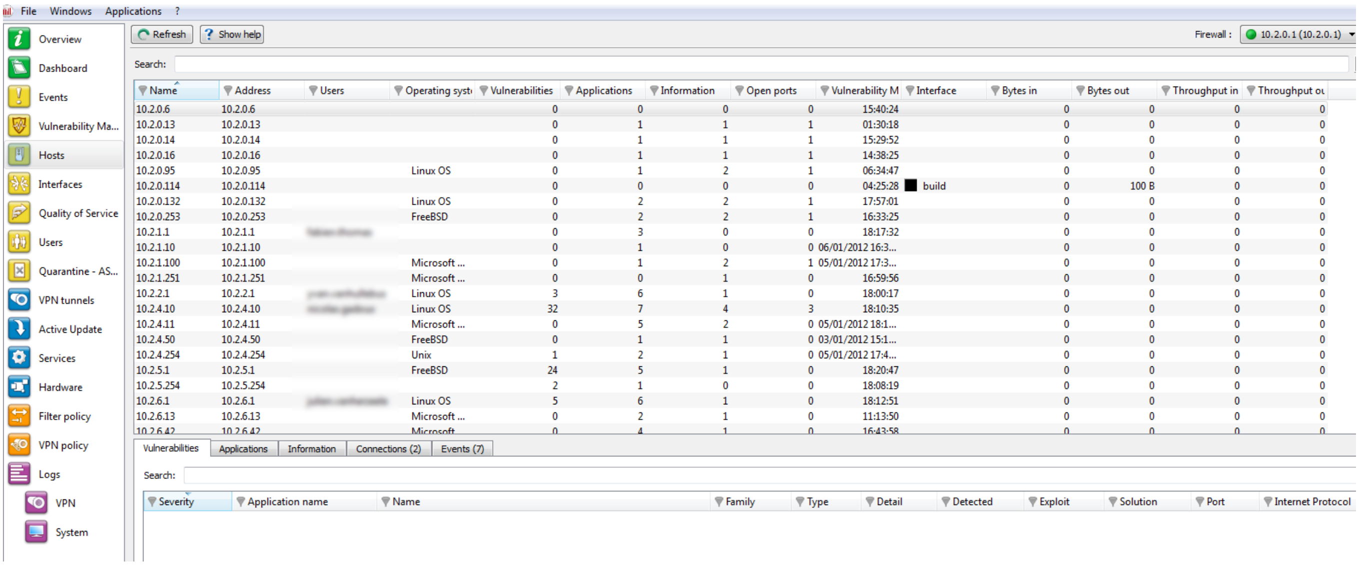
REMARK

Refer to the user guide **NETASQ UNIFIED MANAGER** to configure **VULNERABILITY MANAGER**.

4.3. HOSTS

From the menu directory, click on `Hosts`.

This window lists the connected hosts (these hosts had been created earlier as objects in **NETASQ UNIFIED MANAGER**).



Name	Address	Users	Operating syst	Vulnerabilities	Applications	Information	Open ports	Vulnerability M	Interface	Bytes in	Bytes out	Throughput in	Throughput ou
10.2.0.6	10.2.0.6			0	0	0	0	15:40:24		0	0	0	0
10.2.0.13	10.2.0.13			0	1	1	1	01:30:18		0	0	0	0
10.2.0.14	10.2.0.14			0	1	1	1	15:29:52		0	0	0	0
10.2.0.16	10.2.0.16			0	1	1	1	14:38:25		0	0	0	0
10.2.0.95	10.2.0.95		Linux OS	0	1	2	1	06:34:47		0	0	0	0
10.2.0.114	10.2.0.114			0	0	0	0	04:25:28	■ build	0	100 B	0	0
10.2.0.132	10.2.0.132		Linux OS	0	2	2	1	17:57:01		0	0	0	0
10.2.0.253	10.2.0.253		FreeBSD	0	2	2	1	16:33:25		0	0	0	0
10.2.1.1	10.2.1.1	[redacted]		0	3	0	0	18:17:32		0	0	0	0
10.2.1.10	10.2.1.10			0	1	0	0	06/01/2012 16:3...		0	0	0	0
10.2.1.100	10.2.1.100		Microsoft ...	0	1	2	1	05/01/2012 17:3...		0	0	0	0
10.2.1.251	10.2.1.251		Microsoft ...	0	0	1	0	16:59:56		0	0	0	0
10.2.2.1	10.2.2.1	[redacted]	Linux OS	3	6	1	0	18:00:17		0	0	0	0
10.2.4.10	10.2.4.10	[redacted]	Linux OS	32	7	4	3	18:10:35		0	0	0	0
10.2.4.11	10.2.4.11		Microsoft ...	0	5	2	0	05/01/2012 18:1...		0	0	0	0
10.2.4.50	10.2.4.50		FreeBSD	0	1	1	0	03/01/2012 15:1...		0	0	0	0
10.2.4.254	10.2.4.254		Unix	1	2	1	0	05/01/2012 17:4...		0	0	0	0
10.2.5.1	10.2.5.1		FreeBSD	24	5	1	0	18:20:47		0	0	0	0
10.2.5.254	10.2.5.254			2	1	0	0	18:08:19		0	0	0	0
10.2.6.1	10.2.6.1	[redacted]	Linux OS	5	6	1	0	18:12:51		0	0	0	0
10.2.6.13	10.2.6.13		Microsoft ...	0	2	1	0	11:13:50		0	0	0	0
10.2.6.42	10.2.6.42		Microsoft	0	4	1	0	16:43:58		0	0	0	0

Severity	Application name	Name	Family	Type	Detail	Detected	Exploit	Solution	Port	Internet Protocol

Figure 35: Hosts

The window comprises 3 views:

- A view that lists the hosts
- A view that lists the Vulnerabilities, Applications, Information, Connections and Events relating to the selected host
- A help view that allows working around the selected vulnerability, if a solution exists

4.3.1. “Host” view

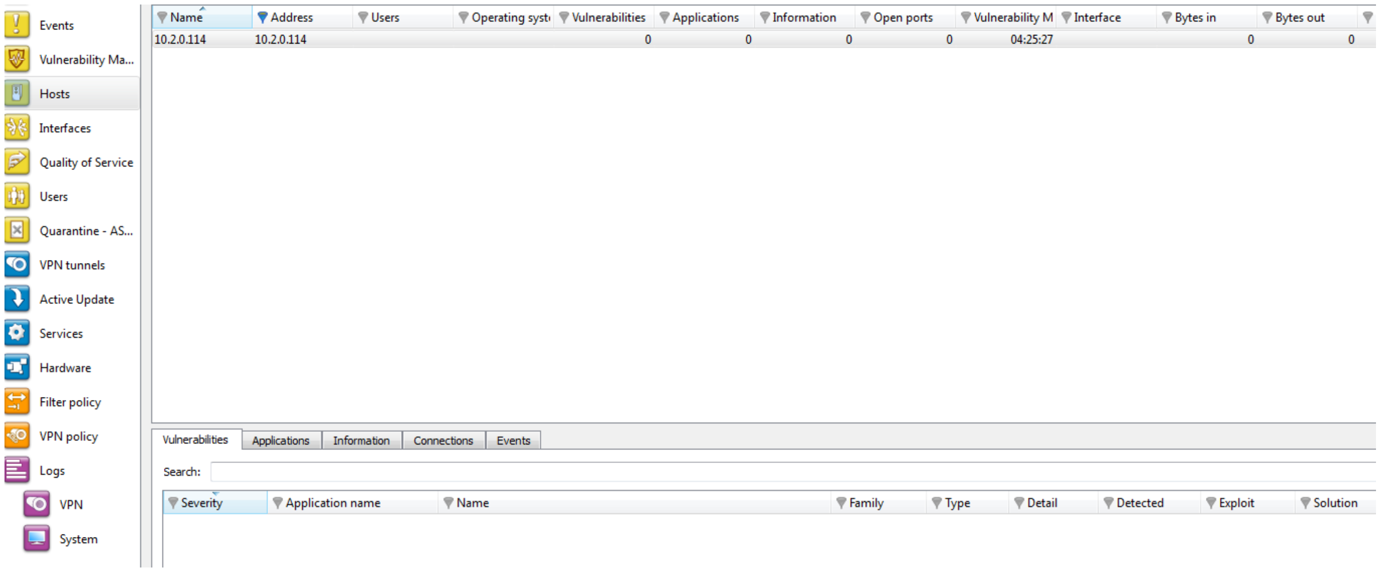
This view allows you to see all the hosts that the firewall detects. Each line represents a host.

The information seen in the “Hosts” view is as follows:

Name	Name of the source host (if declared in objects) or host’s IP address otherwise.
Address	Host’s IP address
Users	User connected to the host (if there is one).
Operating system	Operating system used on the host.
Information	Indicates the information in the Information tab.
Vulnerabilities	Number of vulnerabilities detected.
Applications	Number of applications on the host (if there are any).
Events	Number of detected events
Open ports	Number of open ports.
Last VULNERABILITY MANAGER event	Indicates the date and time of the last VULNERABILITY MANAGER event.
Interface	Interface on which the host is connected.
Bytes in	Number of bytes that have passed through the Firewall from the source host since startup.
Bytes out	Number of bytes that have passed through the Firewall to the source host since startup.
Throughput in	Actual throughput of traffic to this host passing through the Firewall.
Throughput out	Actual throughput of traffic to this host passing through the Firewall.

4.3.2. “Vulnerabilities” view

This tab describes the vulnerabilities detected for a selected host. Each vulnerability can then be viewed in detail.



Name	Address	Users	Operating syst	Vulnerabilities	Applications	Information	Open ports	Vulnerability M	Interface	Bytes in	Bytes out
10.2.0.114	10.2.0.114			0	0	0	0	04:25:27		0	0

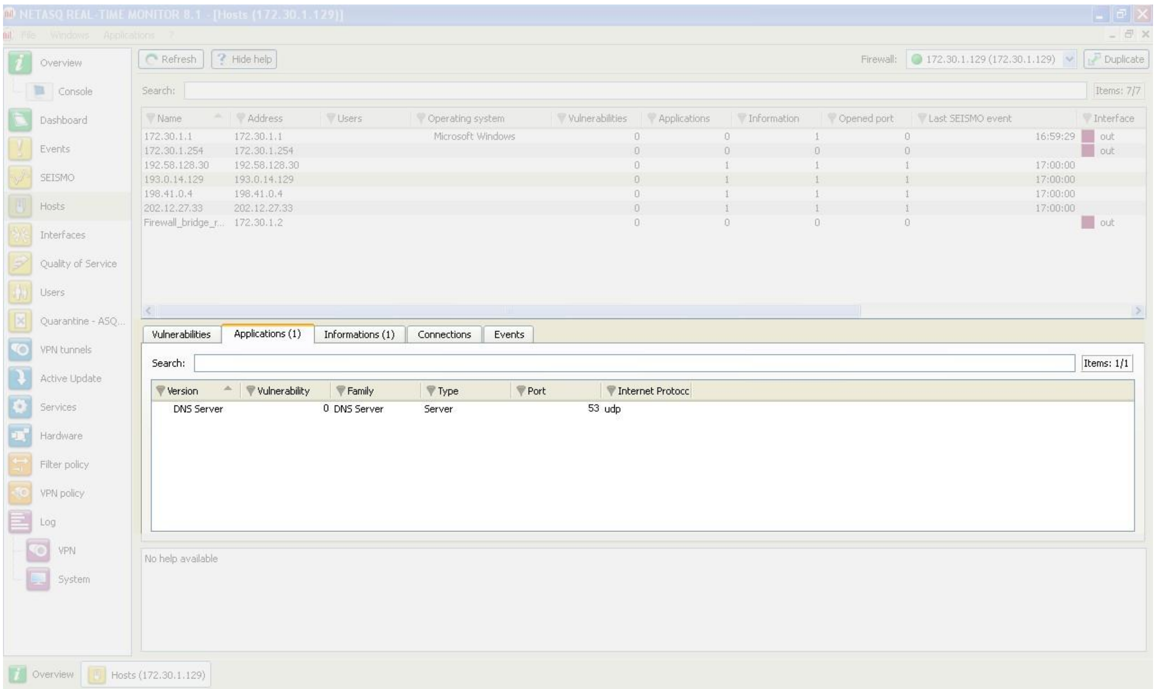
Severity	Application name	Name	Family	Type	Detail	Detected	Exploit	Solution

Figure 36: Hosts – Vulnerabilities

The information provided in the “vulnerability” view is as follows:

Firewall	Ip adress of your firewall NETASQ where the vulnerability comes from.
Severity	Indicates the how severely the host(s) have/has been affected by the vulnerability, according to 4 levels: **Low**, **Moderate**, **High**, **Critical**.
Name	Indicates the name of the vulnerability.
Family	Family to which the vulnerability belongs.
Type	Software type (Client: the software does not provide any service – Server: the software application provides a service).
Target	One of 2 targets: **Client** or **Server**.
Affected hosts	Number of hosts affected by the vulnerability.
Exploit	Local or remote access (via the network). Allows exploiting the vulnerability.
Solution	Indicates whether a solution has been suggested.
Date	Date on which the vulnerability was detected. ❗ **WARNING** This refers to the discovery date and not the date on which the vulnerability appeared on the network.
Internet Protocol	Name of the protocol used.
Id	Vulnerability identifier.

4.3.3. “Applications” view



Search: Items: 7/7

Name	Address	Users	Operating system	Vulnerabilities	Applications	Information	Opened port	Last SEISMO event	Interface
172.30.1.1	172.30.1.1		Microsoft Windows	0	0	1	0	16:59:29	out
172.30.1.254	172.30.1.254			0	0	0	0		out
192.58.128.30	192.58.128.30			0	1	1	1	17:00:00	
193.0.14.129	193.0.14.129			0	1	1	1	17:00:00	
198.41.0.4	198.41.0.4			0	1	1	1	17:00:00	
202.12.27.33	202.12.27.33			0	1	1	1	17:00:00	
Firewall_bridge_r...	172.30.1.2			0	0	0	0		out

Search: Items: 1/1

Version	Vulnerability	Family	Type	Port	Internet Protocc
DNS Server	0	DNS Server	Server	53	udp

Figure 37: Hosts – Applications

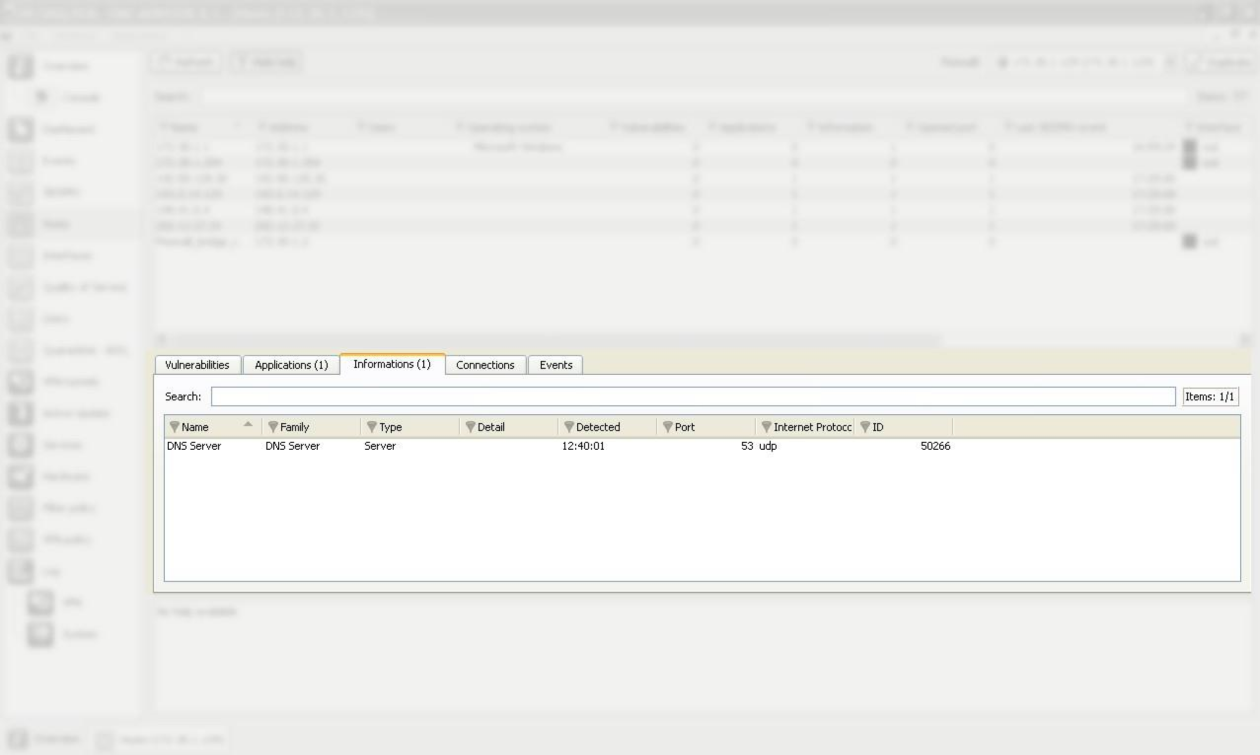
This tab describes the applications detected for a selected host. It is possible to view applications in detail later.

The “Applications” view displays the following data:

Version	Name and version of the application.
Vulnerability	Number of vulnerabilities detected on the application.
Family	The software application’s family (e.g.: “web client”).
Type	Software type (Client: the software does not provide any service – Server: the software application provides a service).
Port	Port used by the application (if it uses one).
Protocol	Protocol used by the application
ID	Unique identifier of the vulnerability family.

4.3.4. “Information” view

This tab describes the information relating to a given host



Name	Family	Type	Detail	Detected	Port	Internet Protocc	ID
DNS Server	DNS Server	Server		12:40:01	53	udp	50266

Figure 38: Hosts – Events

REMARK

The number of events is displayed in the tab’s label.

The information provided in the “events” view is as follows:

Name	Name of the detected OS.
Family	Family of the vulnerability that is likely to appear (Example: SSH).
Type	Application type (Client: the software does not provide any service – Server: the software application provides a service).
	Name of the detected OS.
Detail	Description of information.
Detected	Date and time of detection.
Port	Number of the port on which the vulnerability had been detected.
Protocol	Name of the protocol used.
Id	Unique identifier of the vulnerability family.

4.3.5. “Connections” view

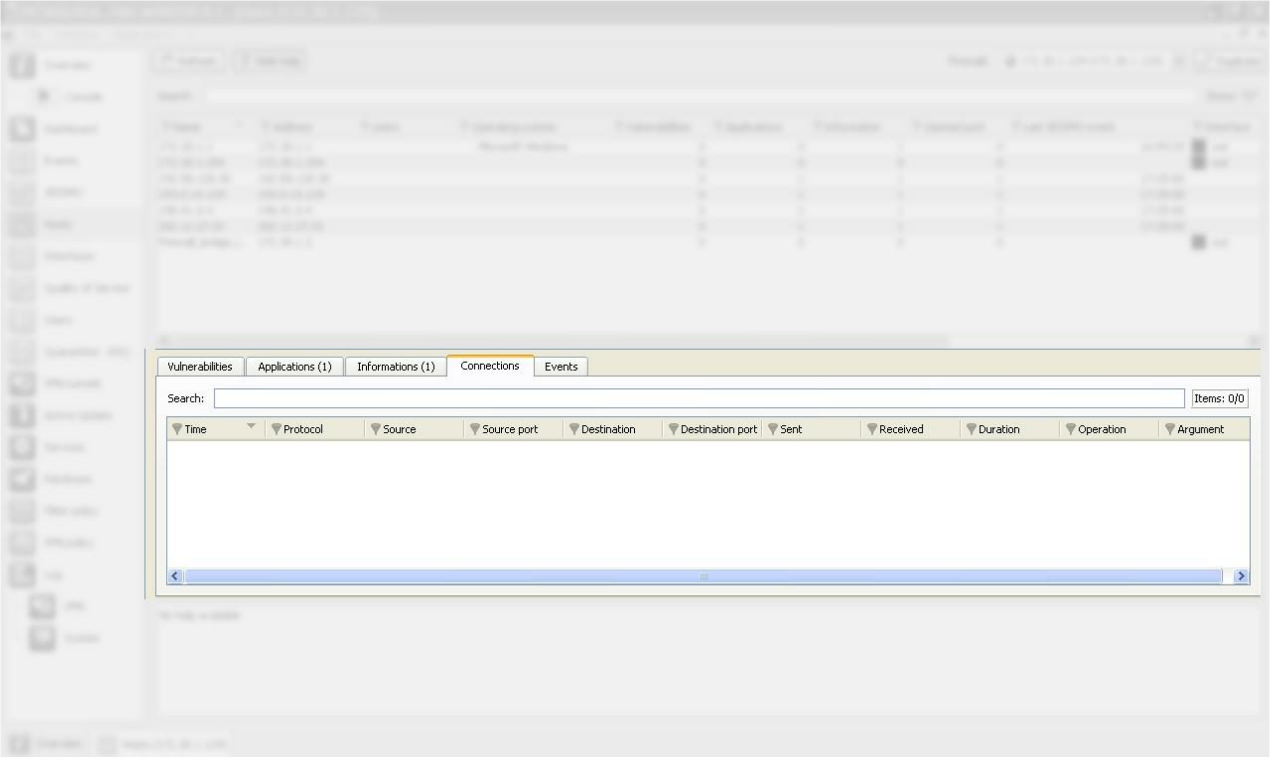


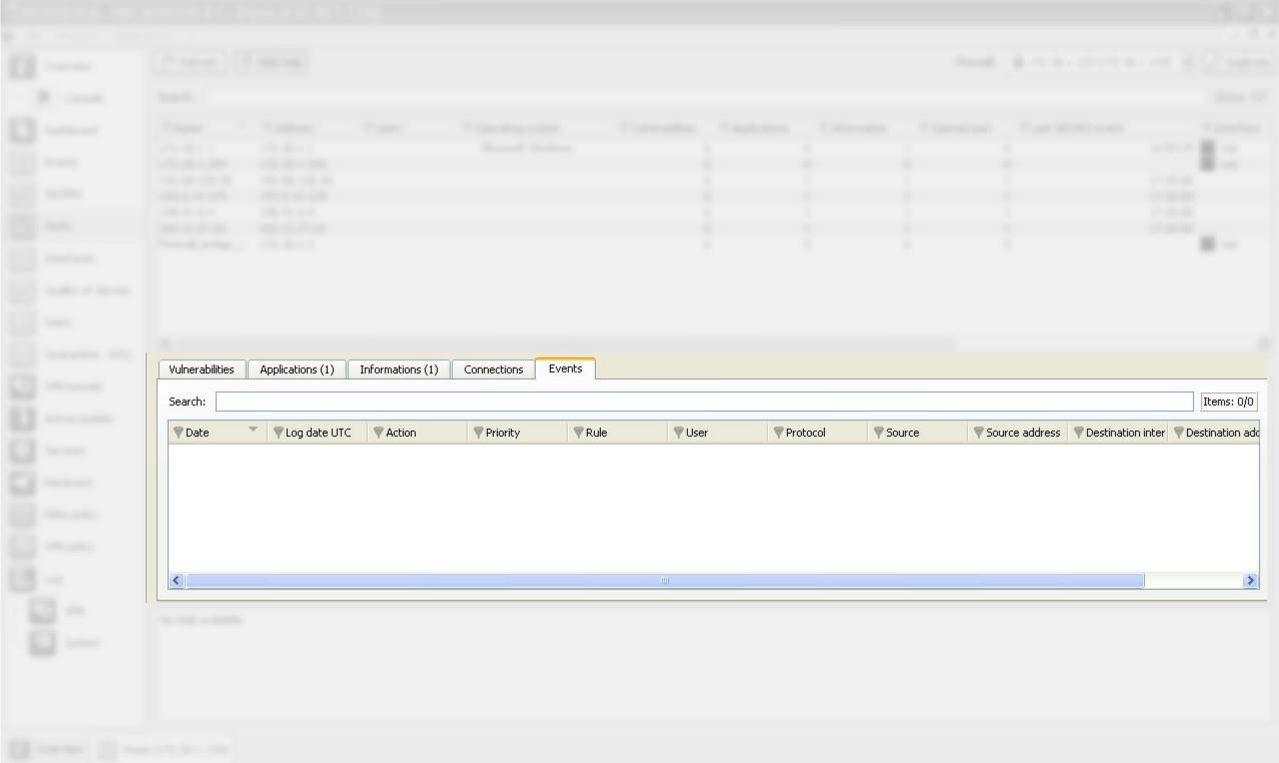
Figure 39: Hosts - Connections

This view allows you to see the connections that the firewall detects. Each line represents a connection.

The “Connections” view displays the following data:

Time	Indicates the date and time of the object’s connection.
Protocol	Communication protocol used for the connection.
Source	Name of the object that connected to the selected host.
Source port	Indicates the number of the source port used for the connection.
Destination	Name of the object for which a connection has been established.
Destination port	Indicates the number of the destination port used for the connection.
Sent	Number of KB sent during the connection.
Received	Number of KB received during the connection
Duration	Connection duration.
Operation	Identified command of the protocol.
Parameter	Operation parameter.

4.3.6. “Events” view



Vulnerabilities | Applications (1) | Informations (1) | Connections | Events

Search: Items: 0/0

Date	Log date UTC	Action	Priority	Rule	User	Protocol	Source	Source address	Destination inter	Destination add

Figure 40: Hosts - Events

This view allows you to view all the events that the firewall has detected. Each line represents an alarm.

The information provided in the “Events” view is as follows:

Date (time)	Date and time the line was recorded in the log file at the firewall’s local time.
UTC Date (time+tz)	UTC date (replaces the GMT)
Start date (starttime)	“Local” date at the start of an event.
UTC start date (startime+tz)	UTC date at the start of an event (a connection).
Timezone (tz)	Firewall’s timezone at the time the log was written.
Logs	File at the source of the event.
Action (action)	Action associated with the filter rule and applied on the packet (**Examples**: Block/Pass…)
Priority (pri)	Determines the alarm level. The possible values are: - 0: emergency - 1: alert - 2: critical - 3: error - 4: warning - 5: notice - 6: information - 7: debug
Rule (ruleid)	Number of the filter rule involved in the raised alarm.
User	Identifier of the user requesting authentication
Protocol (proto)	Protocol of the packet that set off the alarm.
Connection group (groupid)	Identifier that would allow tracking child connections.
Source interface (srcif/srcifname)	Network card of the source interface (name of the source host or the object corresponding to the service port of the source machine if it exists).
Source (src)	IP address or name of the object corresponding to the source host of the packet that set off the event.
Source address (src)	IP address of the source host of the packet that set off the event.
Source port (srcport)	Port number of the source (only if TCP/UDP).
Destination interface (dstif)	Network card of the destination interface.
Destination (dst/dstname)	IP address or name of the object corresponding to the destination host of the packet that set off the event.
Destination address (dst)	IP address of the destination host or name of the object corresponding to the IP address (if it exists) of the packet that set off the event.
Destination port (dstport/dstportname)	Port requested for this connection.
Details	Describes the event relating to the log. This description groups together information from other columns in a single column. *Example: if it is an alarm log, information such as whether the alarm is sensitive, the filter rule number and rule identifier will be indicated in this column or will otherwise be new columns in order to enable filtering.* *Please refer to Appendix G.*
Sensitive alarm (sensitive)	Indicates whether an alarm is sensitive. This alarm is raised whenever the intrusion prevention system detects a sensitive packet and for which it has been configured in intrusion detection mode. If the alarm is sensitive, an icon in the form of an exclamation mark followed by “Yes” will appear. Otherwise, “No” will be indicated. When the alarm is blocked, the icon will be grayed out (it is disabled). **NOTE:** Only protocol alarms can be described as “sensitive”. For alarms that are not in this class, the column will be empty.

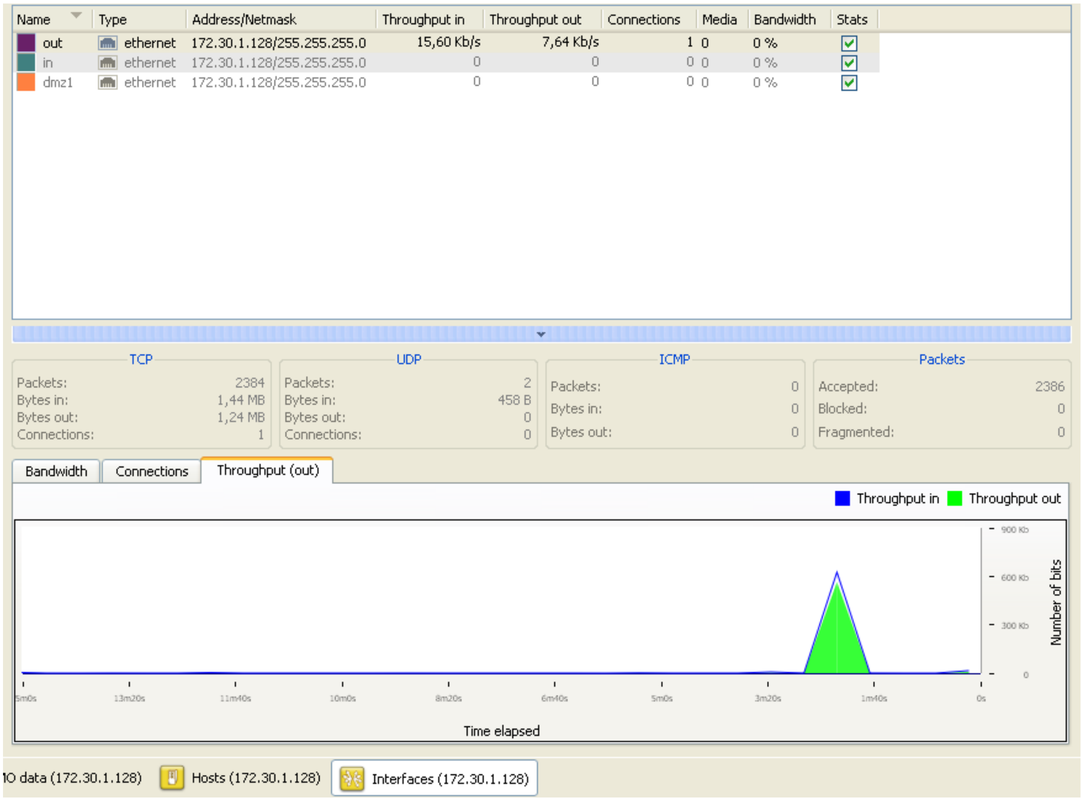
Copy (repeat)	Indicates the number of an event’s occurrences within a defined period. This period is configured in NETASQ UNIFIED MANAGER in the menu “`Logs\Advanced`”, option **Write log duplicates every**.
Id (alarmid)	Indicates the number of the alarm.
Context (class)	Text indicating the category to which the alarm belongs (system, protocol, filter, etc).
Alarm type (classification)	Code (number) indicating the alarm category.
Caller	VoIP: Indicates the caller
Callee	VoIP: Indicates the callee
Duration	Connection time.
Data sent (sent)	Number of KB sent during the connection.
Data received (rcvd)	Number of KB received during the connection.
Operation (op)	Identified command of the protocol.
Result	Result of the operation in the protocol (example: 404 which indicates an error).
Parameter (arg)	Operation parameter.
Category (cat_site)	Web category of the requested website.
Spam level (spamlevel)	0 (Message not spam) 1,2 and 3 (spam) x (error during the treatment of the message) and ? (the nature of the message could not be determined)
Virus (virus)	Indicates whether there is a virus.
IP (ipproto)	Internet protocol (tcp or udp).
Media	Type of traffic detected (audio, video, application,…)
Message (Msg)	Detailed description of the alarm.
ICMP code (icmpcode)	ICMP code in the alarm logs.
ICMP type (icmptype)	ICMP type in the alarm logs.
Packet	Indicates the IP packet for which the alarm was raised. Right-clicking on this packet allows it to be viewed through a packet analyzer. The information displayed in this column shows the size of the IPv4 packets (value beginning with 45). Packet sizes vary according to the firewall model. ● S 64 bytes: U30 to U70. ● M 128 bytes: U120 to U450 ● L 1500 bytes: U1100 to U1500 and NG1000-A ● XL 1500 bytes: U6000, NG5000-A ❗ WARNING To view a packet, a software program needs to be installed on your workstation.

4.4. INTERFACES

4.4.1. Introduction

DEFINITION

A zone, whether real or virtual, that separates two elements. The interface thus refers to what the other element need to know about the other in order to operate correctly.



Name	Type	Address/Netmask	Throughput in	Throughput out	Connections	Media	Bandwidth	Stats
out	ethernet	172.30.1.128/255.255.255.0	15,60 Kb/s	7,64 Kb/s	1	0	0 %	☑
in	ethernet	172.30.1.128/255.255.255.0	0	0	0	0	0 %	☑
dmz1	ethernet	172.30.1.128/255.255.255.0	0	0	0	0	0 %	☑

TCP

Packets:	2384
Bytes in:	1,44 MB
Bytes out:	1,24 MB
Connections:	1

UDP

Packets:	2
Bytes in:	458 B
Bytes out:	0
Connections:	0

ICMP

Packets:	0
Bytes in:	0
Bytes out:	0

Packets

Accepted:	2386
Blocked:	0
Fragmented:	0

Figure 41: Interfaces

The **Interfaces** menu presents different statistics concerning:

- Bandwidth
- Connections
- Throughput

Statistics are displayed in the form of graphs.

The vertical and horizontal axes are graduated. The horizontal axis represents time, and the vertical axis is either:

- Bandwidth percentage
- The number of connections, or
- Throughput expressed in bytes, kilobytes or megabytes.

4.4.1.1. Interface types

- Vlan.
- Ethernet.
- PPTP.
- Dialup.

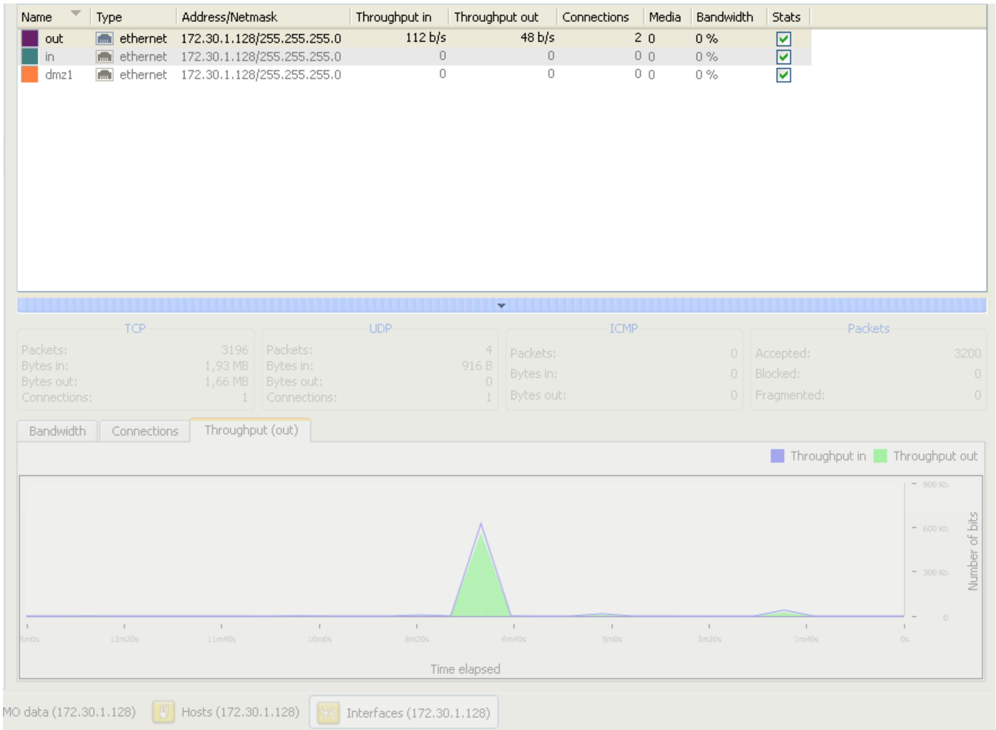
REMARK

The interfaces are grayed out or do not appear at all when they are inactive.

The window consists of 3 views:

- A view of the interfaces in tables (or legend)
- A details zone
- A zone for viewing graphs

4.4.2. Legend view (or tabular view of interfaces)



Name	Type	Address/Netmask	Throughput in	Throughput out	Connections	Media	Bandwidth	Stats
out	ethernet	172.30.1.128/255.255.255.0	112 b/s	48 b/s	2	0	0 %	☑
in	ethernet	172.30.1.128/255.255.255.0	0	0	0	0	0 %	☑
dmz1	ethernet	172.30.1.128/255.255.255.0	0	0	0	0	0 %	☑

TCP
Packets: 3196
Bytes in: 1,93 MB
Bytes out: 1,66 MB
Connections: 1

UDP
Packets: 4
Bytes in: 916 B
Bytes out: 0
Connections: 1

ICMP
Packets: 0
Bytes in: 0
Bytes out: 0

Packets
Accepted: 3200
Blocked: 0
Fragmented: 0

Figure 42: Interfaces – Legend

This view allows you to view all the interfaces that the firewall has detected. Each line represents an interface.

The information provided in the "legend" view is as follows:

Name	Name and color attributed to the interface. The colors allow you to distinguish the interface in the different graphs.
Type	Type of interface with a matching icon.
Address/ Network	The interface's address and sub-network mask.
Throughput in	Indicates the real incoming throughput.
Throughput out	Indicates the real outgoing throughput.
Connections	Number of real-time connections on each interface of the firewall over a defined period.
Media	By default, its value is 0. The throughput of a network interface can be configured via **NETASQ UNIFIED MANAGER**.
Bandwidth	Indicates the percentage of bandwidth used for an interface.
Stats	If this option is selected, the graph corresponding to this interface will be displayed.

REMARK
Inactive interfaces are grayed out.

You will notice the colors of the visible interfaces at the top of the window. These colors are defined in the network parameters of the **NETASQ UNIFIED MANAGER** for each interface (refer to the ***NETASQ UNIFIED MANAGER*** *user manual*).

4.4.3. "Details" view

Each chart provides statistical information on throughput for each interface:

- Name, IP address, subnet mask (American format – see Appendix for explanations), connection type (10 or 100Mbits, half duplex or full duplex),
- Instantaneous (left) and maximum (right) throughput,
- Number of packets and volume in bytes for TCP, UDP and ICMP,
- Number of TCP connections,
- Total number of packets accepted, blocked and fragmented by the Firewall.

4.4.4. "Bandwidth" tab

The bandwidth graph displays the percentage of use of the available bandwidth on each interface in real time.

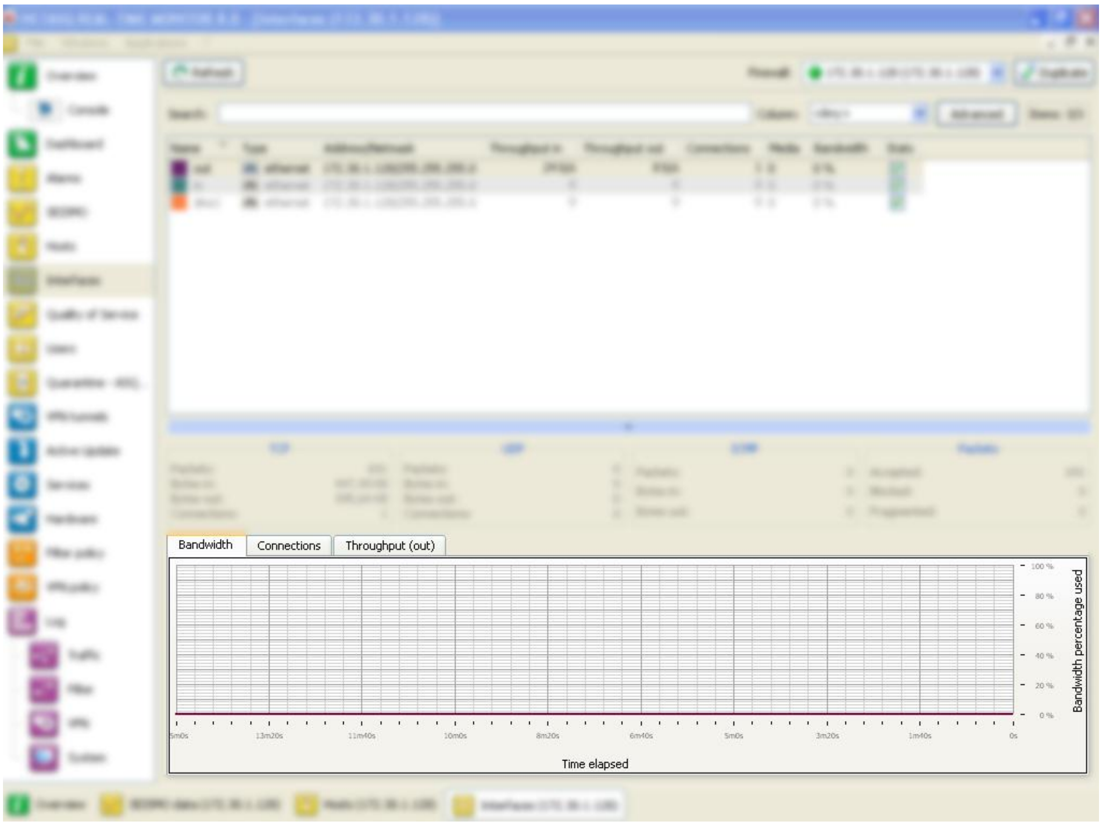


Figure 43: Interfaces - Bandwidth

Each interface is represented by a different color of which the legend may be found at the top of the graph.

Maximum bandwidth represents the theoretical maximum throughput supported by the interface.

> **Example**
> For a 100Mbits/s line used in full duplex, this maximum is 200 Mbits/s, and for a 10Mbits/s line used in half duplex it is 10 Mbits/s.

4.4.5. “Connections” tab

The connection graph displays in real time the number of connections on each of the Firewall’s interfaces during the defined period.

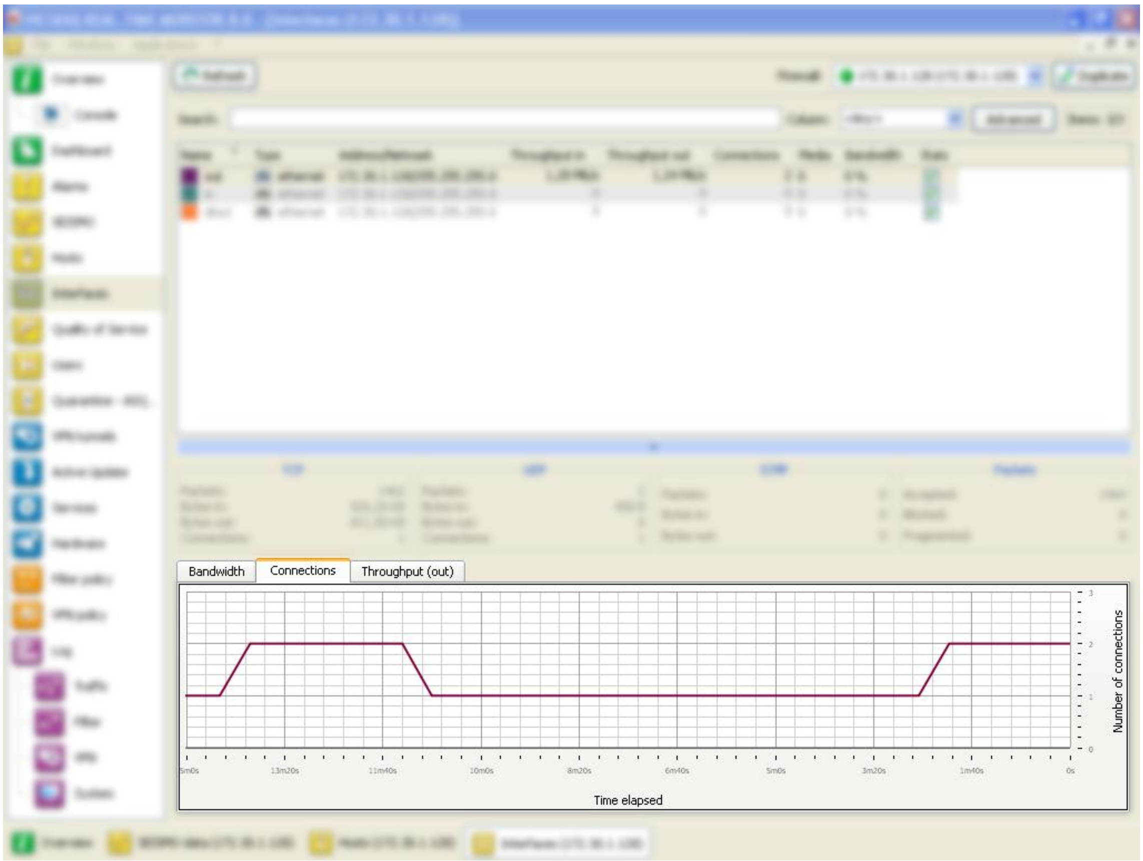


Figure 44: Interfaces - Connections

Each interface is represented by a different color of which the legend may be found at the top of the graph.

4.4.6. “Throughput” tab

The throughput graph represents the real throughput on each of the Firewall’s interfaces. The throughput scale automatically adapts to the maximum throughput recorded during the period.

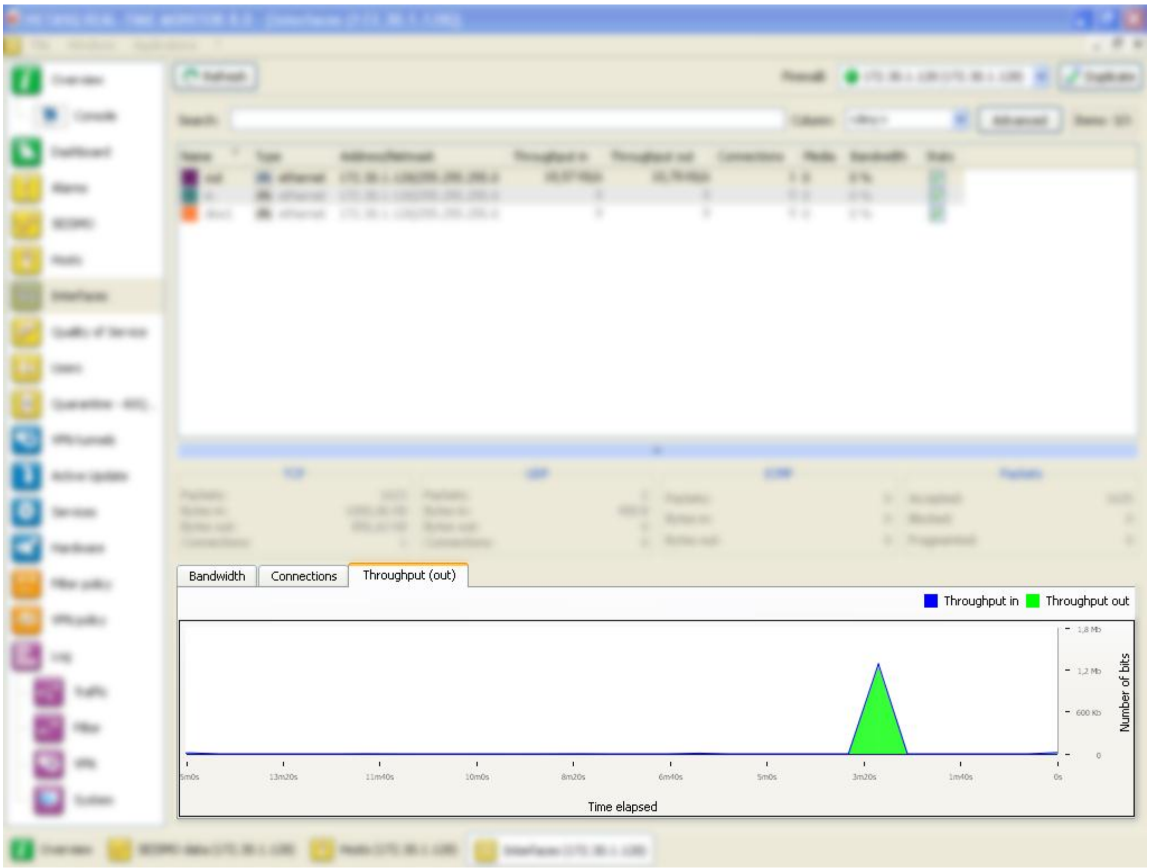


Figure 45: Interfaces - Throughput

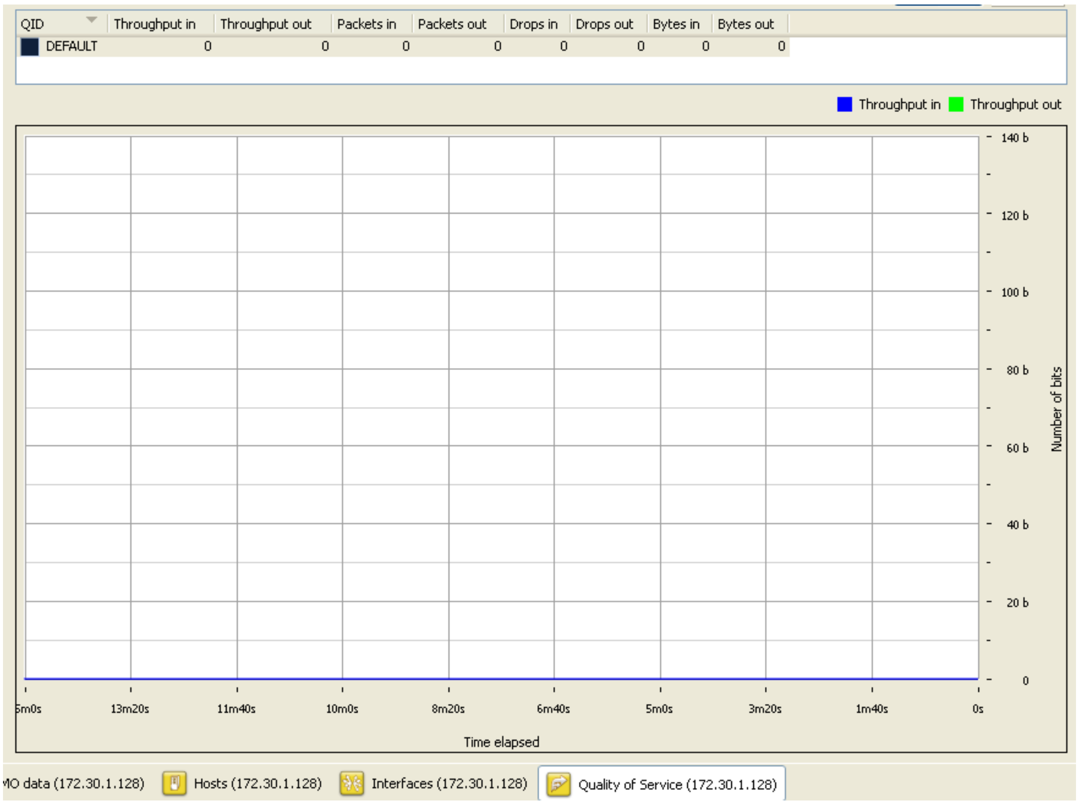
For each interface, the throughput graph indicates the ingoing and outgoing throughput.

To modify the interface on which throughput is viewed, click on this interface in the legend at the top right section of the graph. The interface currently being viewed will be highlighted in blue.

4.5. QUALITY OF SERVICE (QoS)

REMARKS

1) Quality of Service, which has a high level of abstraction, refers to the ability to provide a network service according to parameters defined in a Service Level Agreement (SLA). The “quality” of the service is therefore gauged by its availability, latency rate, fluctuations, throughput and rate of lost packets.
2) Where network resources are concerned, the “Quality of service” refers to a network element’s ability to provide traffic prioritization services and bandwidth and latency time control.



QID	Throughput in	Throughput out	Packets in	Packets out	Drops in	Drops out	Bytes in	Bytes out
DEFAULT	0	0	0	0	0	0	0	0

Figure 46: Quality of service

This window consists of 2 views:

- A table view
- A graph view

This view shows the incoming and outgoing throughput associated with the different QIDs defined on the firewall’s QoS policy.

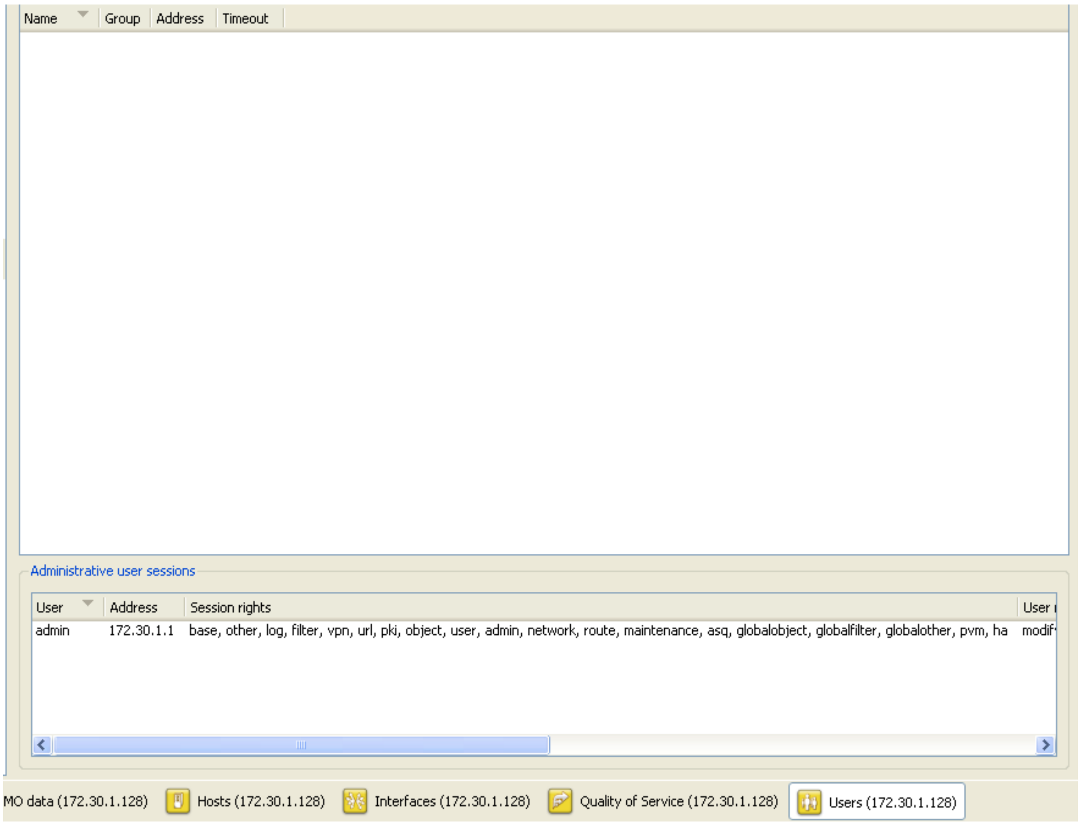
The following data is displayed when you click on the **`Quality of service`** menu:

QID	Name of the policy defined for accepting or rejecting packets.
Throughput in	Indicates in real time the incoming throughput that the QID manages.
Throughput out	Indicates in real time the outgoing throughput that the QID manages
Packets in	Number of incoming packets in real time over a defined period.
Packets out	Number of outgoing packets in real time over a defined period
Drops in	Number of rejected incoming packets on the network.
Drops out	Number of rejected outgoing packets.
Bytes in	Value in Kbits or Mbits.
Bytes out	Value in Kbits or Mbits.

4.6. USERS

4.6.1. Introduction

The **`User`** menu enables viewing, in the capacity of an administrator, the users who are currently connected on the Firewall.



Name	Group	Address	Timeout

Administrative user sessions

User	Address	Session rights	User r
admin	172.30.1.1	base, other, log, filter, vpn, url, pki, object, user, admin, network, route, maintenance, asq, globalobject, globalfilter, globalother, pvm, ha	modif

Figure 47: Users

This window comprises 2 views:

- A “users” view.
- An “administration session” view.

4.6.1.1. “Users” view

The information provided in the “users” view is as follows:

Firewall	Serial number or name (if known) of the firewall.
Name	Name of authenticated user.
Group	Name of the group to which the user belongs.
Address	User’s IP address.
Timeout	Time remaining for this authentication session (a user is authenticated only for a limited duration).

4.6.1.2. “Administration sessions” view

This window enables finding out the session privileges of the user connected to the firewall.

The information provided in the “administration sessions” view is as follows:

Firewall	Serial number or name (if known) of the firewall.
User	Authenticated user’s identifier.
Address	IP address of the connected user’s host.
Session privileges	Indicates the privileges for the current session. Only one administrator is allowed to make changes in each session (modify and mon_write privileges).
User privileges	Indicates privileges that have been given to the connected user (these privileges include adding, modifying, deleting or reading in different applications).
Session identifier	Number identifying the session.

4.7. QUARANTINE – ASQ BYPASS

DEFINITIONS

1) **Dynamic quarantine**: the quarantine is manually done and for a set duration.
2) **Static quarantine**: the quarantine is automatic and for permanent. Static quarantining is configuring in the application **NETASQ UNIFIED MANAGER**.

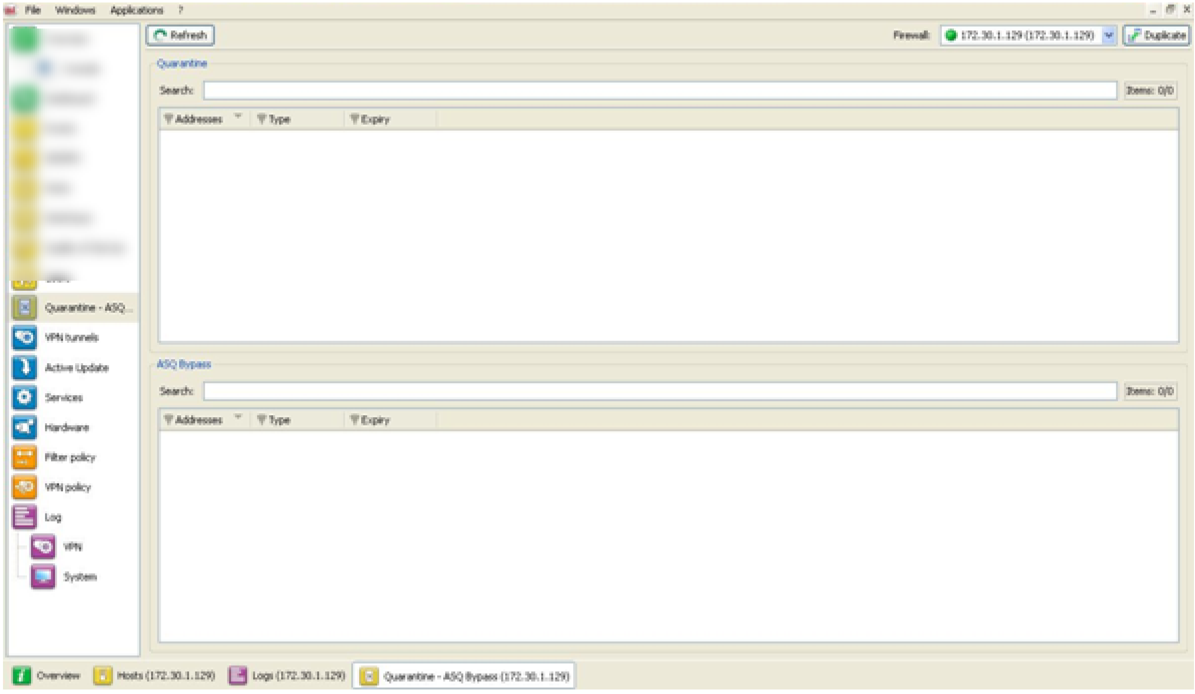


Figure 48: Quarantine

This window comprises 2 views:

- A “Quarantine” view
- An “ASQ Bypass” view.

4.7.1. “Quarantine” view

This window shows the hosts that have been dynamically quarantined. Hosts in static quarantine are not reflected in this list.

The information provided in the “Quarantine” view is as follows:

Addresses	IP address of the host(s) affected by the quarantine.
Type	2 options are possible: **Host to host** and **Host to all**.
Expiry	Time at which the quarantine will expire.

4.7.2. “ASQ Bypass” view

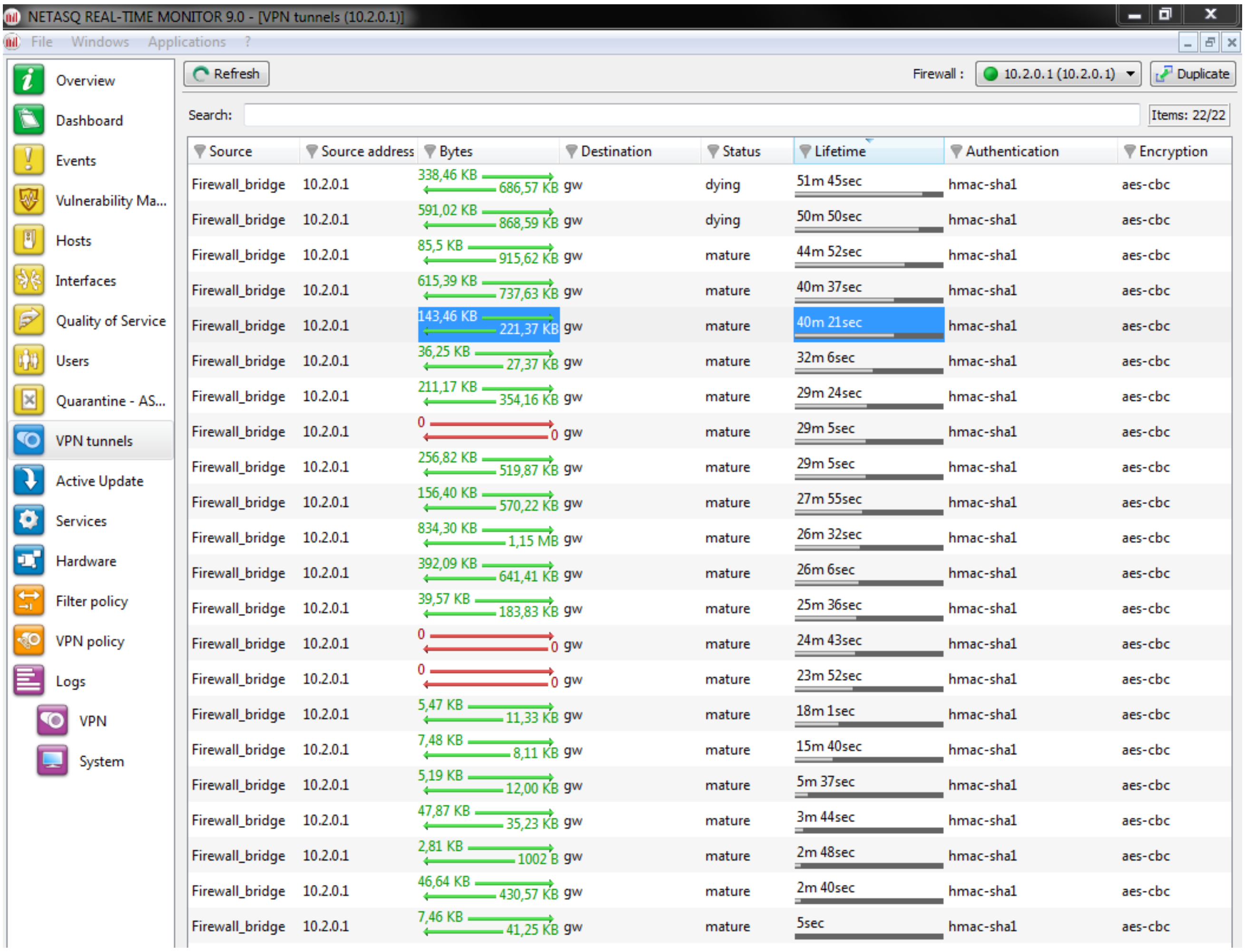
The information provided in the “ASQ Bypass” view is as follows:

Addresses	IP address of the host(s) affected by the ASQ Bypass.
Type	2 options area possible: **Host to host** and **Host to all**.
Expiry	Time at which the ASQ Bypass will expire.

5. NETWORK ACTIVITY

5.1. VPN TUNNELS

The following window appears when you click on the **`VPN Tunnels`** menu:



Source	Source address	Bytes	Destination	Status	Lifetime	Authentication	Encryption
Firewall_bridge	10.2.0.1	338,46 KB 686,57 KB	gw	dying	51m 45sec	hmac-sha1	aes-cbc
Firewall_bridge	10.2.0.1	591,02 KB 868,59 KB	gw	dying	50m 50sec	hmac-sha1	aes-cbc
Firewall_bridge	10.2.0.1	85,5 KB 915,62 KB	gw	mature	44m 52sec	hmac-sha1	aes-cbc
Firewall_bridge	10.2.0.1	615,39 KB 737,63 KB	gw	mature	40m 37sec	hmac-sha1	aes-cbc
Firewall_bridge	10.2.0.1	143,46 KB 221,37 KB	gw	mature	40m 21sec	hmac-sha1	aes-cbc
Firewall_bridge	10.2.0.1	36,25 KB 27,37 KB	gw	mature	32m 6sec	hmac-sha1	aes-cbc
Firewall_bridge	10.2.0.1	211,17 KB 354,16 KB	gw	mature	29m 24sec	hmac-sha1	aes-cbc
Firewall_bridge	10.2.0.1	0 0	gw	mature	29m 5sec	hmac-sha1	aes-cbc
Firewall_bridge	10.2.0.1	256,82 KB 519,87 KB	gw	mature	29m 5sec	hmac-sha1	aes-cbc
Firewall_bridge	10.2.0.1	156,40 KB 570,22 KB	gw	mature	27m 55sec	hmac-sha1	aes-cbc
Firewall_bridge	10.2.0.1	834,30 KB 1,15 MB	gw	mature	26m 32sec	hmac-sha1	aes-cbc
Firewall_bridge	10.2.0.1	392,09 KB 641,41 KB	gw	mature	26m 6sec	hmac-sha1	aes-cbc
Firewall_bridge	10.2.0.1	39,57 KB 183,83 KB	gw	mature	25m 36sec	hmac-sha1	aes-cbc
Firewall_bridge	10.2.0.1	0 0	gw	mature	24m 43sec	hmac-sha1	aes-cbc
Firewall_bridge	10.2.0.1	0 0	gw	mature	23m 52sec	hmac-sha1	aes-cbc
Firewall_bridge	10.2.0.1	5,47 KB 11,33 KB	gw	mature	18m 1sec	hmac-sha1	aes-cbc
Firewall_bridge	10.2.0.1	7,48 KB 8,11 KB	gw	mature	15m 40sec	hmac-sha1	aes-cbc
Firewall_bridge	10.2.0.1	5,19 KB 12,00 KB	gw	mature	5m 37sec	hmac-sha1	aes-cbc
Firewall_bridge	10.2.0.1	47,87 KB 35,23 KB	gw	mature	3m 44sec	hmac-sha1	aes-cbc
Firewall_bridge	10.2.0.1	2,81 KB 1002 B	gw	mature	2m 48sec	hmac-sha1	aes-cbc
Firewall_bridge	10.2.0.1	46,64 KB 430,57 KB	gw	mature	2m 40sec	hmac-sha1	aes-cbc
Firewall_bridge	10.2.0.1	7,46 KB 41,25 KB	gw	mature	5sec	hmac-sha1	aes-cbc

Figure 49: VPN tunnels

Here, you will see statistical information on the tunnel’s operation.

The data displayed in this window are as follows:

Source	IP address or name of the tunnel initiator
Source address	IP address of the tunnel initiator
Bytes	Indicates incoming and outgoing throughput.
Destination	Destination IP address
Status	Indicates the tunnel’s status. (Example: Mature).
Lifetime	The SA’s (Security Association) lifetime in a graphical representation of the position in this lifetime as well as the value (expressed in hours, minutes and seconds)

Authentication	The authentication algorithm
Encryption	Name of the encryption algorithm

The tunnel is made up of two sub-tunnels, one for each direction of the datagram transmission.

REMARK

The algorithms and limits have been configured in the **NETASQ UNIFIED MANAGER** (refer to the Manager user and configuration guide help for further details).

TIP

You will find other information on the parameters in this window in the RFC.

Further information may be found in RFC 2401 IPSEC:
http://www.ietf.org/rfc/rfc2401.txt
or on sites such as: http://www.guill.net/reseaux/Ipsec.html

This status is color-coded. The line containing VPN information will use the color corresponding to the tunnel's status.

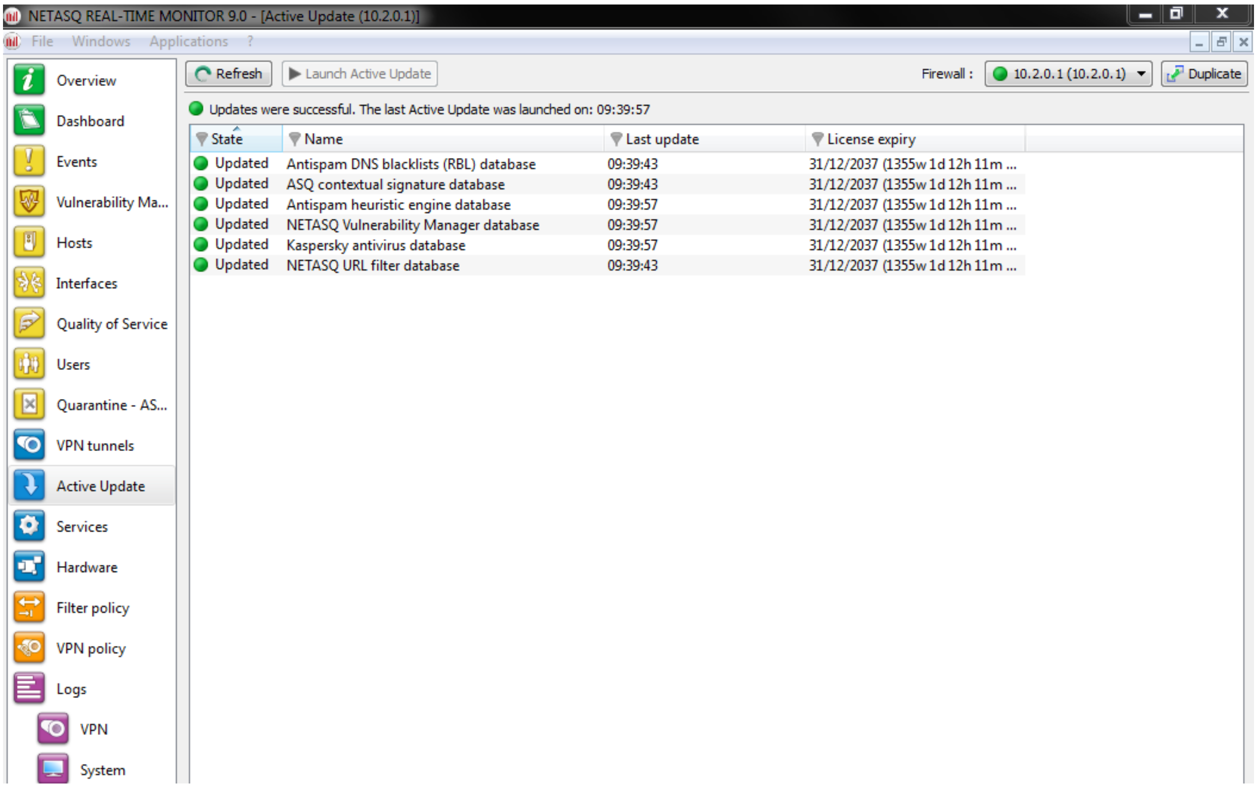
▒	Undetermined.
🟩	Larval: the SA is in the process of being negotiated or has not been completely negotiated.
⬜	Mature: the SA has been established and is available; the VPN tunnel has been correctly set up.
🟪	Dying: the SA will soon expire; a new SA is in the progress of being negotiated.
⬛	Dead: the SA has expired and cannot be used; the tunnel has not been set up and is therefore no longer active.
🟦	Orphan: a problem has arisen, in general this status means that the tunnel has been set up in only one direction.

5.2. ACTIVE UPDATE

DEFINITION: ACTIVE UPDATE

Enables updating the antivirus database, ASQ contextual signatures, the list of antispam servers and the URLs used for dynamic URL filtering.

This window displays the status of Active Update on the firewall for each type of update available (Antispam, Antivirus, Contextual signatures, Dynamic URL).



Updates were successful. The last Active Update was launched on: 09:39:57

State	Name	Last update	License expiry
● Updated	Antispam DNS blacklists (RBL) database	09:39:43	31/12/2037 (1355w 1d 12h 11m ...
● Updated	ASQ contextual signature database	09:39:43	31/12/2037 (1355w 1d 12h 11m ...
● Updated	Antispam heuristic engine database	09:39:57	31/12/2037 (1355w 1d 12h 11m ...
● Updated	NETASQ Vulnerability Manager database	09:39:57	31/12/2037 (1355w 1d 12h 11m ...
● Updated	Kaspersky antivirus database	09:39:57	31/12/2037 (1355w 1d 12h 11m ...
● Updated	NETASQ URL filter database	09:39:43	31/12/2037 (1355w 1d 12h 11m ...

Figure 50: Active Update

Active Update is used for automatically keeping URL databases up to date by downloading them on servers such as updateX.netasq.com.

The Monitor screen indicates the result of the last update (successful or failed) and the date of the last update.

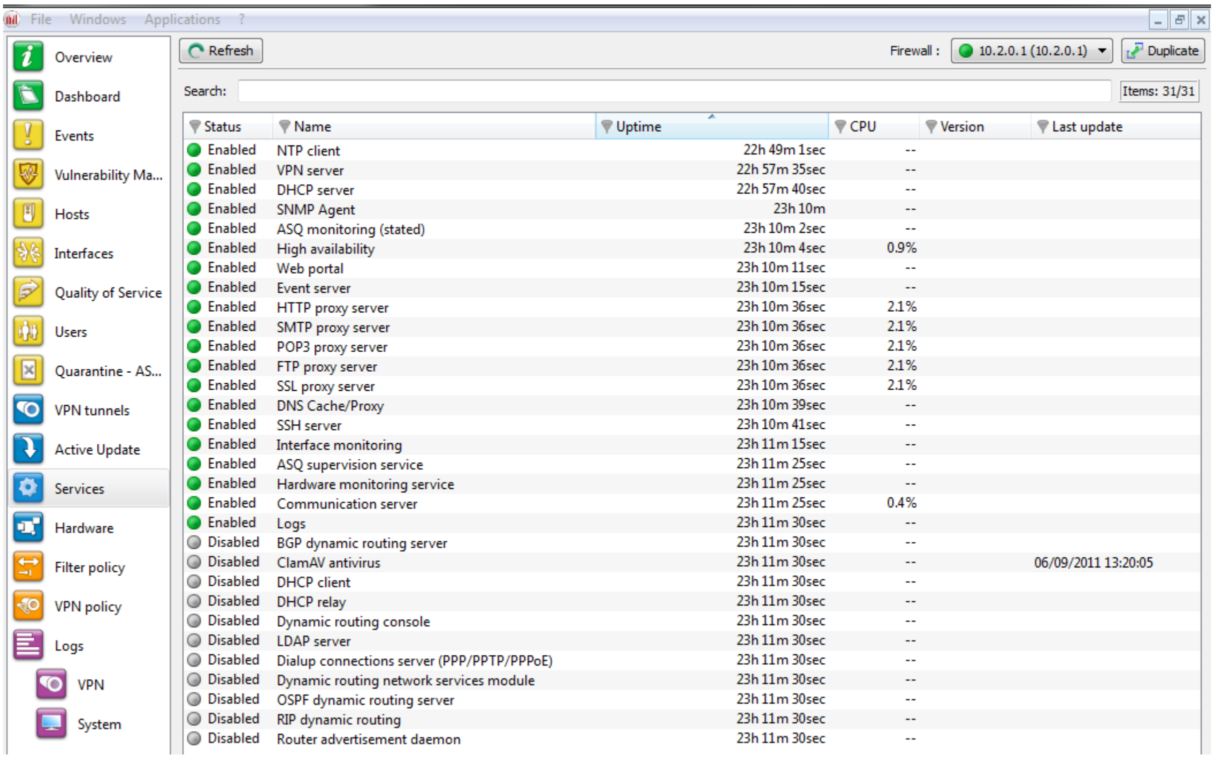
The following data will be displayed when you click on the `Active Update` menu:

Status	Indicates the status of the Active Update. 2 options are possible: **The last update failed** / **Updated**.
Name	Indicates the update data categories.
Last update	Indicates the date and time of the last update.
License expiry	Indicates the expiry date of the license option for this category.

5.3.

5.4. SERVICES

This window sets out the services (active and inactive) on the Firewall and for how long they have been active/inactive.



Firewall : 10.2.0.1 (10.2.0.1)

Search:

Items: 31/31

Status	Name	Uptime	CPU	Version	Last update
Enabled	NTP client	22h 49m 1sec	--		
Enabled	VPN server	22h 57m 35sec	--		
Enabled	DHCP server	22h 57m 40sec	--		
Enabled	SNMP Agent	23h 10m	--		
Enabled	ASQ monitoring (stated)	23h 10m 2sec	--		
Enabled	High availability	23h 10m 4sec	0.9%		
Enabled	Web portal	23h 10m 11sec	--		
Enabled	Event server	23h 10m 15sec	--		
Enabled	HTTP proxy server	23h 10m 36sec	2.1%		
Enabled	SMTP proxy server	23h 10m 36sec	2.1%		
Enabled	POP3 proxy server	23h 10m 36sec	2.1%		
Enabled	FTP proxy server	23h 10m 36sec	2.1%		
Enabled	SSL proxy server	23h 10m 36sec	2.1%		
Enabled	DNS Cache/Proxy	23h 10m 39sec	--		
Enabled	SSH server	23h 10m 41sec	--		
Enabled	Interface monitoring	23h 11m 15sec	--		
Enabled	ASQ supervision service	23h 11m 25sec	--		
Enabled	Hardware monitoring service	23h 11m 25sec	--		
Enabled	Communication server	23h 11m 25sec	0.4%		
Enabled	Logs	23h 11m 30sec	--		
Disabled	BGP dynamic routing server	23h 11m 30sec	--		
Disabled	ClamAV antivirus	23h 11m 30sec	--		06/09/2011 13:20:05
Disabled	DHCP client	23h 11m 30sec	--		
Disabled	DHCP relay	23h 11m 30sec	--		
Disabled	Dynamic routing console	23h 11m 30sec	--		
Disabled	LDAP server	23h 11m 30sec	--		
Disabled	Dialup connections server (PPP/PPTP/PPPoE)	23h 11m 30sec	--		
Disabled	Dynamic routing network services module	23h 11m 30sec	--		
Disabled	OSPF dynamic routing server	23h 11m 30sec	--		
Disabled	RIP dynamic routing	23h 11m 30sec	--		
Disabled	Router advertisement daemon	23h 11m 30sec	--		

Figure 51: Services

Proxies are displayed in 4 distinct entries:

- HTTP Proxy
- SMTP Proxy
- POP3 Proxy
- FTP Proxy

Information regarding antivirus can also be seen in this window (activity, version, last update, expiry of its license).

The following data will be displayed when you click on the `Services` menu:

Status	Indicates whether services are active or inactive
Name	Indicates the names of services
Uptime	Indicates the number of number of days the service has been running and the time of activation.
Version	Version number of the service
Last update	Date of the last time the service was updated.

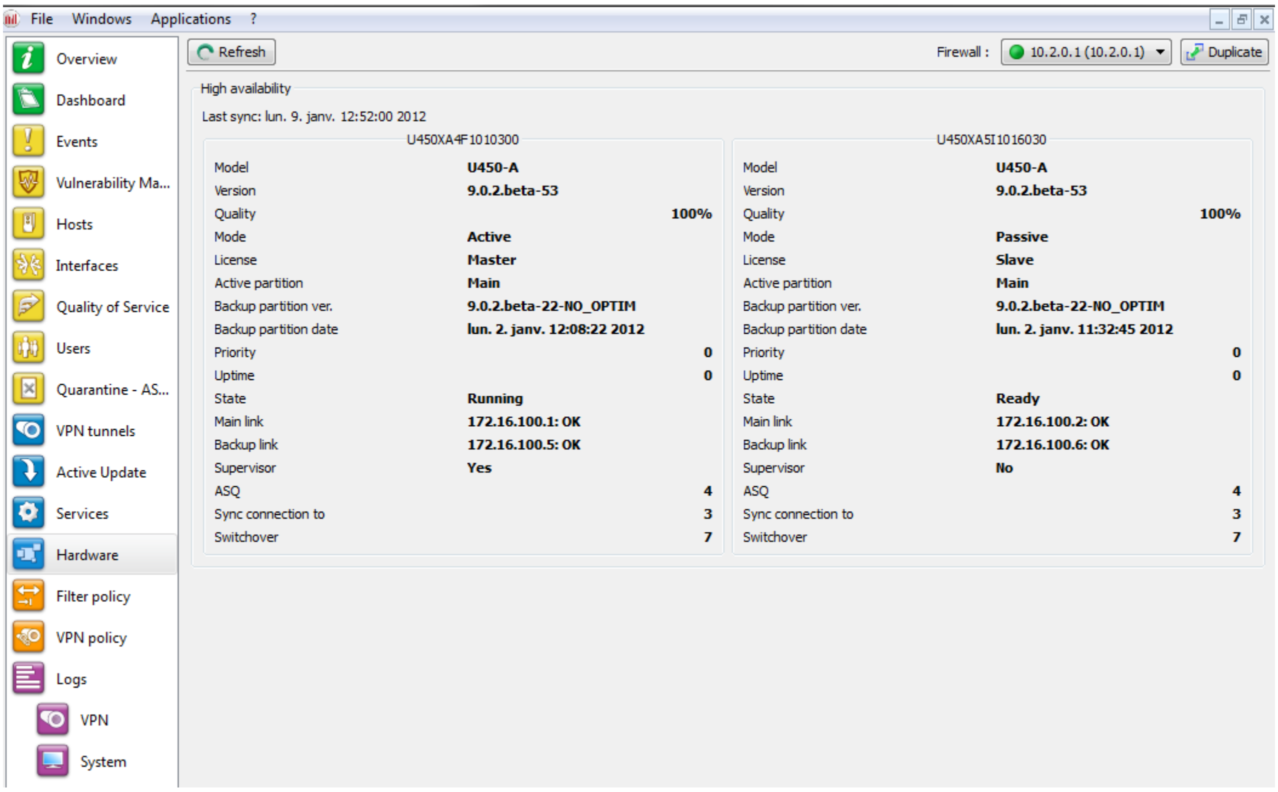
5.5. HARDWARE

5.5.1. High availability

This window displays information concerning the initialization of high availability.

DEFINITION OF HIGH AVAILABILITY

High availability is an option that allows two firewalls (identified through a MasterHA and BackupHA license) to exchange information on their statuses, via a dedicated link in order to ensure service continuity in the event one of the firewalls breaks down. Firewalls in high availability have the same configuration – only their serial numbers, licenses (Master or Backup) and most of all, their status (active or passive) differ.



High availability

Last sync: lun. 9. janv. 12:52:00 2012

U450XA4F1010300		U450XA5I1016030	
Model	U450-A	Model	U450-A
Version	9.0.2.beta-53	Version	9.0.2.beta-53
Quality	100%	Quality	100%
Mode	Active	Mode	Passive
License	Master	License	Slave
Active partition	Main	Active partition	Main
Backup partition ver.	9.0.2.beta-22-NO_OPTIM	Backup partition ver.	9.0.2.beta-22-NO_OPTIM
Backup partition date	lun. 2. janv. 12:08:22 2012	Backup partition date	lun. 2. janv. 11:32:45 2012
Priority	0	Priority	0
Uptime	0	Uptime	0
State	Running	State	Ready
Main link	172.16.100.1: OK	Main link	172.16.100.2: OK
Backup link	172.16.100.5: OK	Backup link	172.16.100.6: OK
Supervisor	Yes	Supervisor	No
ASQ	4	ASQ	4
Sync connection to	3	Sync connection to	3
Switchover	7	Switchover	7

Figure 52: Hardware

NOTE

Version 9 of multifunction firewalls NETASQ allows you to benefit from high availability support new-generation display with the date of the last synchronization of the cases.

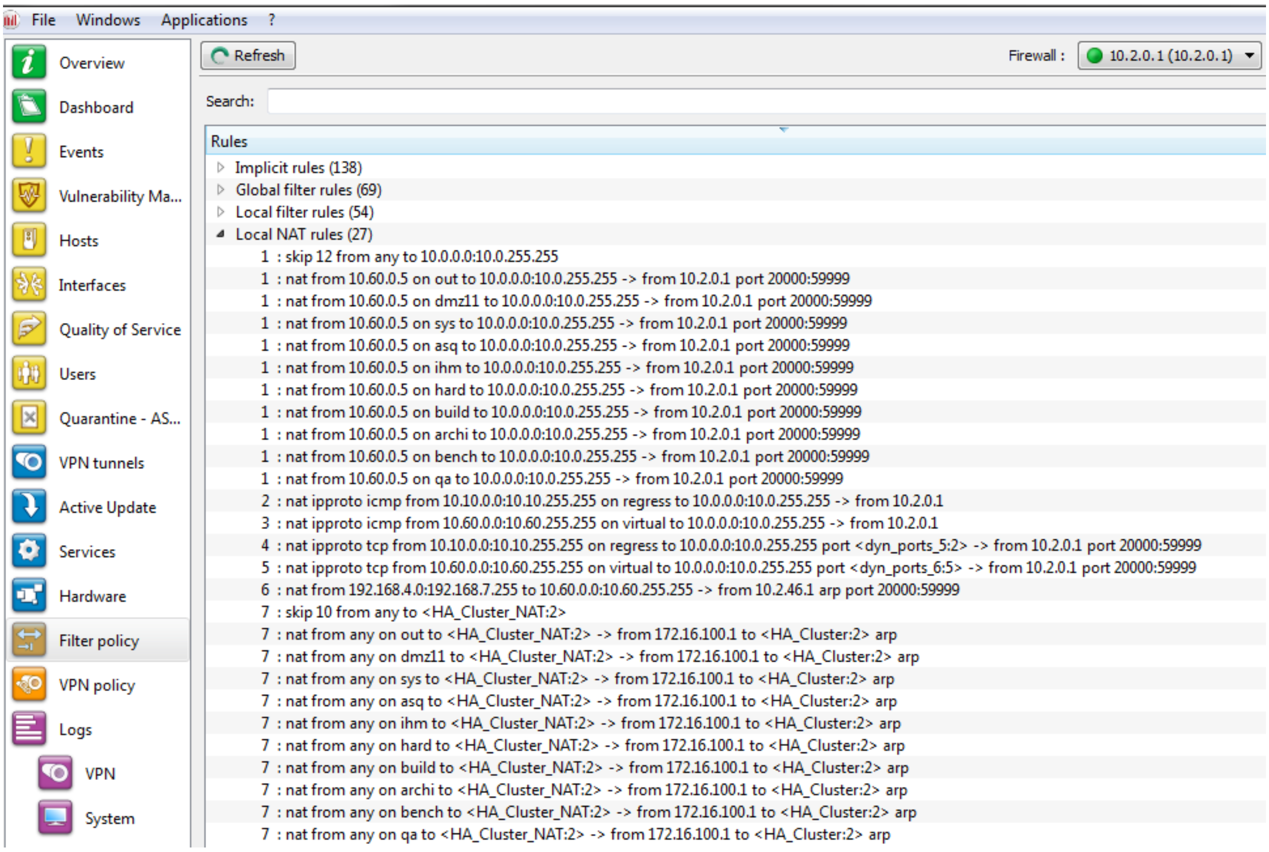
You will also note an evolution in the support RAID.

Figure 53: Raid

6. POLICIES

6.1. FILTER POLICY

The **Filter Policy** menu, accessible from the menu directory, in Monitor recaps the active filter policy by grouping together implicit rules, global filter rules and local filter rules.



```
Implicit rules (138)
Global filter rules (69)
Local filter rules (54)
Local NAT rules (27)
    1 : skip 12 from any to 10.0.0.0:10.0.255.255
    1 : nat from 10.60.0.5 on out to 10.0.0.0:10.0.255.255 -> from 10.2.0.1 port 20000:59999
    1 : nat from 10.60.0.5 on dmz11 to 10.0.0.0:10.0.255.255 -> from 10.2.0.1 port 20000:59999
    1 : nat from 10.60.0.5 on sys to 10.0.0.0:10.0.255.255 -> from 10.2.0.1 port 20000:59999
    1 : nat from 10.60.0.5 on asq to 10.0.0.0:10.0.255.255 -> from 10.2.0.1 port 20000:59999
    1 : nat from 10.60.0.5 on ihm to 10.0.0.0:10.0.255.255 -> from 10.2.0.1 port 20000:59999
    1 : nat from 10.60.0.5 on hard to 10.0.0.0:10.0.255.255 -> from 10.2.0.1 port 20000:59999
    1 : nat from 10.60.0.5 on build to 10.0.0.0:10.0.255.255 -> from 10.2.0.1 port 20000:59999
    1 : nat from 10.60.0.5 on archi to 10.0.0.0:10.0.255.255 -> from 10.2.0.1 port 20000:59999
    1 : nat from 10.60.0.5 on bench to 10.0.0.0:10.0.255.255 -> from 10.2.0.1 port 20000:59999
    1 : nat from 10.60.0.5 on qa to 10.0.0.0:10.0.255.255 -> from 10.2.0.1 port 20000:59999
    2 : nat ipproto icmp from 10.10.0.0:10.10.255.255 on regress to 10.0.0.0:10.0.255.255 -> from 10.2.0.1
    3 : nat ipproto icmp from 10.60.0.0:10.60.255.255 on virtual to 10.0.0.0:10.0.255.255 -> from 10.2.0.1
    4 : nat ipproto tcp from 10.10.0.0:10.10.255.255 on regress to 10.0.0.0:10.0.255.255 port <dyn_ports_5:2> -> from 10.2.0.1 port 20000:59999
    5 : nat ipproto tcp from 10.60.0.0:10.60.255.255 on virtual to 10.0.0.0:10.0.255.255 port <dyn_ports_6:5> -> from 10.2.0.1 port 20000:59999
    6 : nat from 192.168.4.0:192.168.7.255 to 10.60.0.0:10.60.255.255 -> from 10.2.46.1 arp port 20000:59999
    7 : skip 10 from any to <HA_Cluster_NAT:2>
    7 : nat from any on out to <HA_Cluster_NAT:2> -> from 172.16.100.1 to <HA_Cluster:2> arp
    7 : nat from any on dmz11 to <HA_Cluster_NAT:2> -> from 172.16.100.1 to <HA_Cluster:2> arp
    7 : nat from any on sys to <HA_Cluster_NAT:2> -> from 172.16.100.1 to <HA_Cluster:2> arp
    7 : nat from any on asq to <HA_Cluster_NAT:2> -> from 172.16.100.1 to <HA_Cluster:2> arp
    7 : nat from any on ihm to <HA_Cluster_NAT:2> -> from 172.16.100.1 to <HA_Cluster:2> arp
    7 : nat from any on hard to <HA_Cluster_NAT:2> -> from 172.16.100.1 to <HA_Cluster:2> arp
    7 : nat from any on build to <HA_Cluster_NAT:2> -> from 172.16.100.1 to <HA_Cluster:2> arp
    7 : nat from any on archi to <HA_Cluster_NAT:2> -> from 172.16.100.1 to <HA_Cluster:2> arp
    7 : nat from any on bench to <HA_Cluster_NAT:2> -> from 172.16.100.1 to <HA_Cluster:2> arp
    7 : nat from any on qa to <HA_Cluster_NAT:2> -> from 172.16.100.1 to <HA_Cluster:2> arp
```

Figure 54: Filter policy

Each row displayed is set out as follows:

```
<identifier for the rule type >: <identifier for the rule in the
slot>: <filter rule>
```

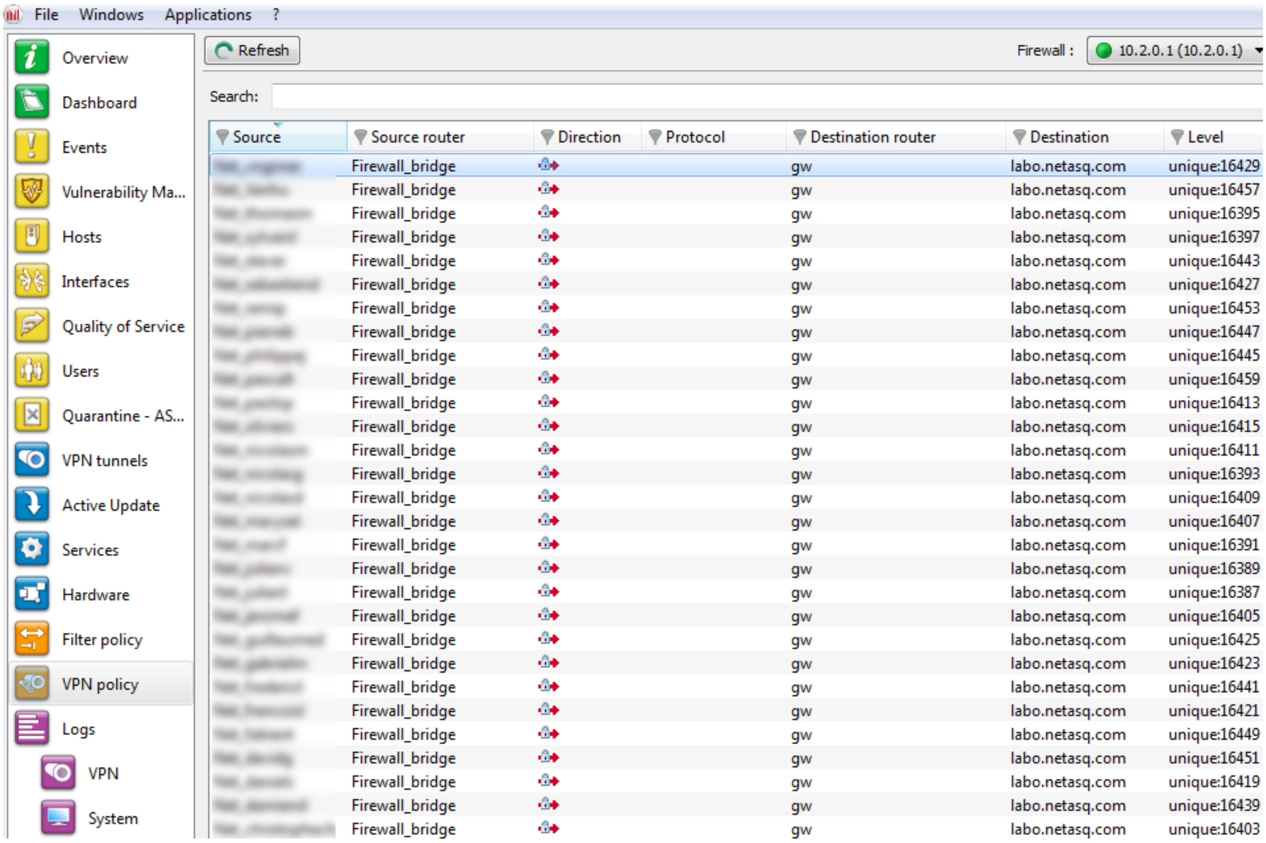
Where

- <identifier for the rule type > can be “0” for implicit rules, “1” for global filters and “2” for local filters.
- <identifier for the rule in the slot>: this identifier is always “0” for implicit rules.
- <filter rule>: filter rule created by NETASQ.

6.2. VPN POLICY

Definition VPN (*Virtual Private Network*)

The interconnection of networks in a secure and transparent manner for participating applications and protocols – generally used to link private networks to each other through the internet.



Source	Source router	Direction	Protocol	Destination router	Destination	Level
[redacted]	Firewall_bridge	→		gw	labo.netasq.com	unique:16429
[redacted]	Firewall_bridge	→		gw	labo.netasq.com	unique:16457
[redacted]	Firewall_bridge	→		gw	labo.netasq.com	unique:16395
[redacted]	Firewall_bridge	→		gw	labo.netasq.com	unique:16397
[redacted]	Firewall_bridge	→		gw	labo.netasq.com	unique:16443
[redacted]	Firewall_bridge	→		gw	labo.netasq.com	unique:16427
[redacted]	Firewall_bridge	→		gw	labo.netasq.com	unique:16453
[redacted]	Firewall_bridge	→		gw	labo.netasq.com	unique:16447
[redacted]	Firewall_bridge	→		gw	labo.netasq.com	unique:16445
[redacted]	Firewall_bridge	→		gw	labo.netasq.com	unique:16459
[redacted]	Firewall_bridge	→		gw	labo.netasq.com	unique:16413
[redacted]	Firewall_bridge	→		gw	labo.netasq.com	unique:16415
[redacted]	Firewall_bridge	→		gw	labo.netasq.com	unique:16411
[redacted]	Firewall_bridge	→		gw	labo.netasq.com	unique:16393
[redacted]	Firewall_bridge	→		gw	labo.netasq.com	unique:16409
[redacted]	Firewall_bridge	→		gw	labo.netasq.com	unique:16407
[redacted]	Firewall_bridge	→		gw	labo.netasq.com	unique:16391
[redacted]	Firewall_bridge	→		gw	labo.netasq.com	unique:16389
[redacted]	Firewall_bridge	→		gw	labo.netasq.com	unique:16387
[redacted]	Firewall_bridge	→		gw	labo.netasq.com	unique:16405
[redacted]	Firewall_bridge	→		gw	labo.netasq.com	unique:16425
[redacted]	Firewall_bridge	→		gw	labo.netasq.com	unique:16423
[redacted]	Firewall_bridge	→		gw	labo.netasq.com	unique:16441
[redacted]	Firewall_bridge	→		gw	labo.netasq.com	unique:16421
[redacted]	Firewall_bridge	→		gw	labo.netasq.com	unique:16449
[redacted]	Firewall_bridge	→		gw	labo.netasq.com	unique:16451
[redacted]	Firewall_bridge	→		gw	labo.netasq.com	unique:16419
[redacted]	Firewall_bridge	→		gw	labo.netasq.com	unique:16439
[redacted]	Firewall_bridge	→		gw	labo.netasq.com	unique:16403

Figure 55: VPN policy

The VPN section allows viewing the configuration of different VPN tunnel policies defined in the active VPN slot. These VPN policies do not necessarily have to be used in order to be displayed. The VPN slot only needs to be activated.

The following information is displayed in this window:

Source	Traffic endpoint. Indicates the source network.
Source router	Indicates the address of the source gateway.
Direction	Indicates the direction of the traffic represented by the following icons: ○ ← ○ 🔒→ ○ ←🔒 ○ →
Protocol	Indicates the protocol(s) allowed to pass through the tunnel.
Destination router	Indicates the address of the destination address.
Destination	Traffic endpoint. Indicates the destination network.
Level	Level of security associated with the tunnel. ℹ **REMARK** This level is defined when creating the VPN tunnel according to the encryption and authentication algorithm).
Max lifetime	Maximum lifespan of the configured VPN policy.

7. LOGS

7.1. STATUS OF USE

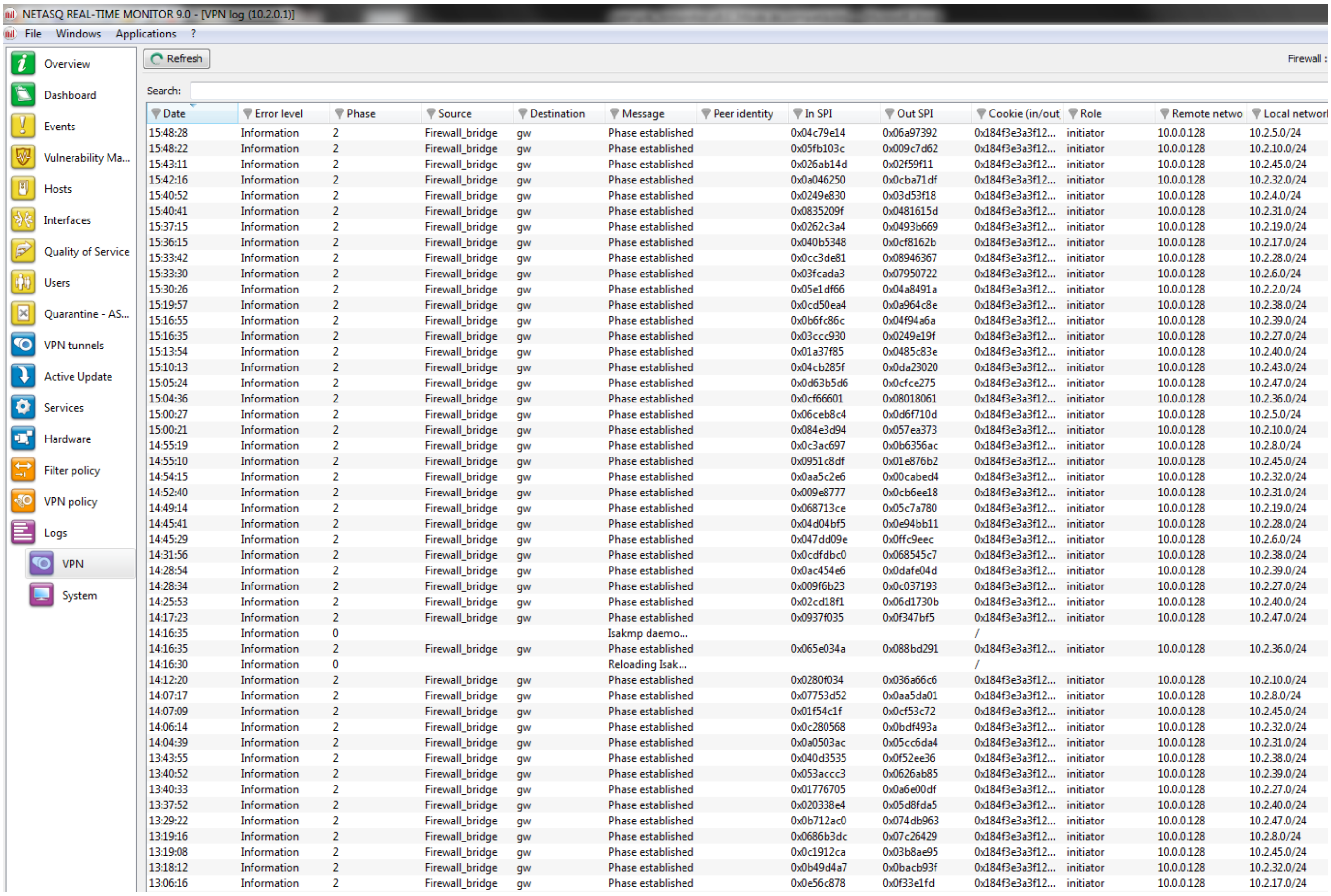
A graph represents the current size of the log file in real time (“Alarms”, “Authentication”, ”Connections”, “Filters”, “ftp”, “Monitor”, “Plugins”, “POP3”, “VULNERABILITY MANAGER”, “Administration”, “SMTP”, “System”, “IPSec VPN”, “Web”, “SSL VPN”) in relation to the size allocated on the Firewall for each log type.

DEFINITION OF LOGS

Chronological record of a computer’s activity, which makes up a journal of events that took place in programs and systems over a given period.

7.2. LOG TYPES

7.2.1. VPN



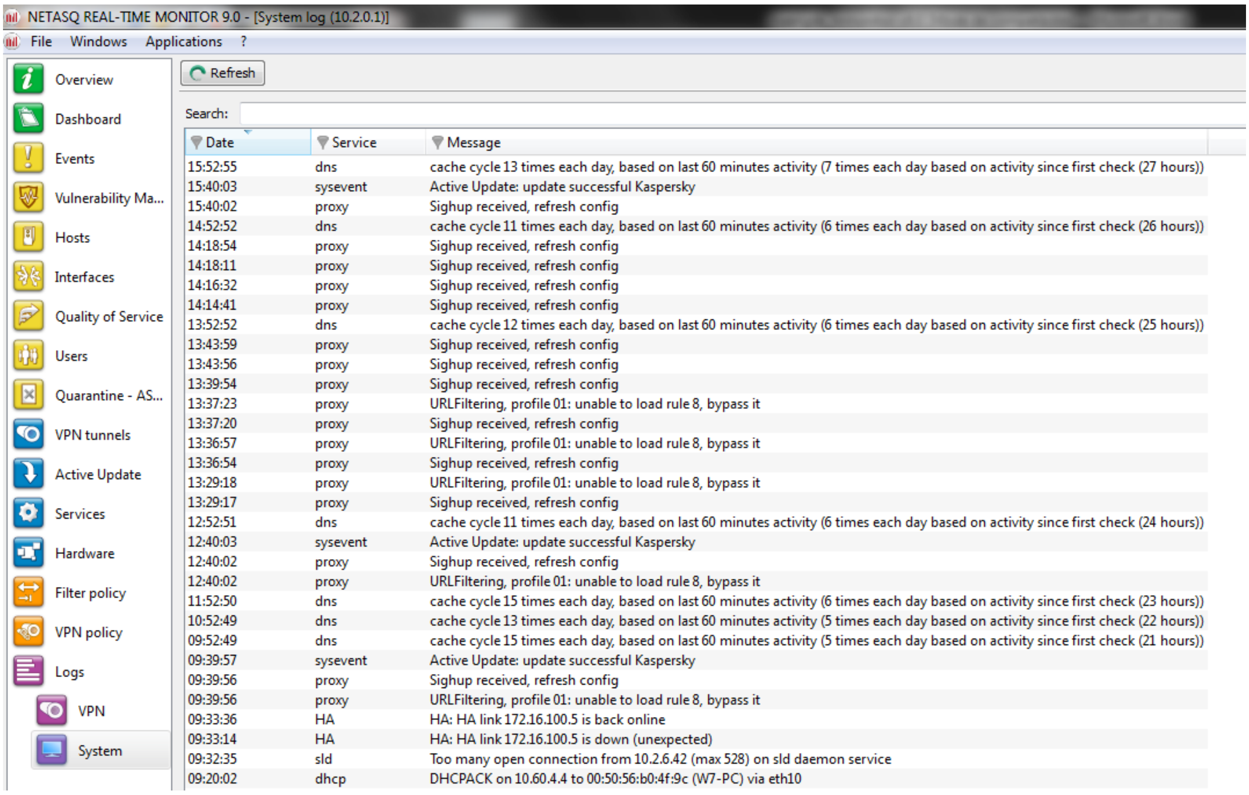
Date	Error level	Phase	Source	Destination	Message	Peer identity	In SPI	Out SPI	Cookie (in/out	Role	Remote netwo	Local networ
15:48:28	Information	2	Firewall_bridge	gw	Phase established		0x04c79e14	0x06a97392	0x184f3e3a3f12...	initiator	10.0.0.128	10.2.5.0/24
15:48:22	Information	2	Firewall_bridge	gw	Phase established		0x05fb103c	0x009c7d62	0x184f3e3a3f12...	initiator	10.0.0.128	10.2.10.0/24
15:43:11	Information	2	Firewall_bridge	gw	Phase established		0x026ab14d	0x02f59f11	0x184f3e3a3f12...	initiator	10.0.0.128	10.2.45.0/24
15:42:16	Information	2	Firewall_bridge	gw	Phase established		0x0a046250	0x0cba71df	0x184f3e3a3f12...	initiator	10.0.0.128	10.2.32.0/24
15:40:52	Information	2	Firewall_bridge	gw	Phase established		0x0249e830	0x03d53f18	0x184f3e3a3f12...	initiator	10.0.0.128	10.2.4.0/24
15:40:41	Information	2	Firewall_bridge	gw	Phase established		0x0835209f	0x0481615d	0x184f3e3a3f12...	initiator	10.0.0.128	10.2.31.0/24
15:37:15	Information	2	Firewall_bridge	gw	Phase established		0x0262c3a4	0x0493b669	0x184f3e3a3f12...	initiator	10.0.0.128	10.2.19.0/24
15:36:15	Information	2	Firewall_bridge	gw	Phase established		0x040b5348	0x0cf8162b	0x184f3e3a3f12...	initiator	10.0.0.128	10.2.17.0/24
15:33:42	Information	2	Firewall_bridge	gw	Phase established		0x0cc3de81	0x08946367	0x184f3e3a3f12...	initiator	10.0.0.128	10.2.28.0/24
15:33:30	Information	2	Firewall_bridge	gw	Phase established		0x03fcada3	0x07950722	0x184f3e3a3f12...	initiator	10.0.0.128	10.2.6.0/24
15:30:26	Information	2	Firewall_bridge	gw	Phase established		0x05e1df66	0x04a8491a	0x184f3e3a3f12...	initiator	10.0.0.128	10.2.2.0/24
15:19:57	Information	2	Firewall_bridge	gw	Phase established		0x0cd50ea4	0x0a964c8e	0x184f3e3a3f12...	initiator	10.0.0.128	10.2.38.0/24
15:16:55	Information	2	Firewall_bridge	gw	Phase established		0x0b6fc86c	0x04f94a6a	0x184f3e3a3f12...	initiator	10.0.0.128	10.2.39.0/24
15:16:35	Information	2	Firewall_bridge	gw	Phase established		0x03ccc930	0x0249e19f	0x184f3e3a3f12...	initiator	10.0.0.128	10.2.27.0/24
15:13:54	Information	2	Firewall_bridge	gw	Phase established		0x01a37f85	0x0485c83e	0x184f3e3a3f12...	initiator	10.0.0.128	10.2.40.0/24
15:10:13	Information	2	Firewall_bridge	gw	Phase established		0x04cb285f	0x0da23020	0x184f3e3a3f12...	initiator	10.0.0.128	10.2.43.0/24
15:05:24	Information	2	Firewall_bridge	gw	Phase established		0x0d63b5d6	0x0cfce275	0x184f3e3a3f12...	initiator	10.0.0.128	10.2.47.0/24
15:04:36	Information	2	Firewall_bridge	gw	Phase established		0x0cf66601	0x08018061	0x184f3e3a3f12...	initiator	10.0.0.128	10.2.36.0/24
15:00:27	Information	2	Firewall_bridge	gw	Phase established		0x06ceb8c4	0x0d6f710d	0x184f3e3a3f12...	initiator	10.0.0.128	10.2.5.0/24
15:00:21	Information	2	Firewall_bridge	gw	Phase established		0x084e3d94	0x057ea373	0x184f3e3a3f12...	initiator	10.0.0.128	10.2.10.0/24
14:55:19	Information	2	Firewall_bridge	gw	Phase established		0x0c3ac697	0x0b6356ac	0x184f3e3a3f12...	initiator	10.0.0.128	10.2.8.0/24
14:55:10	Information	2	Firewall_bridge	gw	Phase established		0x0951c8df	0x01e876b2	0x184f3e3a3f12...	initiator	10.0.0.128	10.2.45.0/24
14:54:15	Information	2	Firewall_bridge	gw	Phase established		0x0aa5c2e6	0x00cabed4	0x184f3e3a3f12...	initiator	10.0.0.128	10.2.32.0/24
14:52:40	Information	2	Firewall_bridge	gw	Phase established		0x009e8777	0x0cb6ee18	0x184f3e3a3f12...	initiator	10.0.0.128	10.2.31.0/24
14:49:14	Information	2	Firewall_bridge	gw	Phase established		0x068713ce	0x05c7a780	0x184f3e3a3f12...	initiator	10.0.0.128	10.2.19.0/24
14:45:41	Information	2	Firewall_bridge	gw	Phase established		0x04d04bf5	0x0e94bb11	0x184f3e3a3f12...	initiator	10.0.0.128	10.2.28.0/24
14:45:29	Information	2	Firewall_bridge	gw	Phase established		0x047dd09e	0x0ffc9eec	0x184f3e3a3f12...	initiator	10.0.0.128	10.2.6.0/24
14:31:56	Information	2	Firewall_bridge	gw	Phase established		0x0cdfdbc0	0x068545c7	0x184f3e3a3f12...	initiator	10.0.0.128	10.2.38.0/24
14:28:54	Information	2	Firewall_bridge	gw	Phase established		0x0ac454e6	0x0dafe04d	0x184f3e3a3f12...	initiator	10.0.0.128	10.2.39.0/24
14:28:34	Information	2	Firewall_bridge	gw	Phase established		0x009f6b23	0x0c037193	0x184f3e3a3f12...	initiator	10.0.0.128	10.2.27.0/24
14:25:53	Information	2	Firewall_bridge	gw	Phase established		0x02cd18f1	0x06d1730b	0x184f3e3a3f12...	initiator	10.0.0.128	10.2.40.0/24
14:17:23	Information	2	Firewall_bridge	gw	Phase established		0x0937f035	0x0f347bf5	0x184f3e3a3f12...	initiator	10.0.0.128	10.2.47.0/24
14:16:35	Information	0			Isakmp daemo...				/			
14:16:35	Information	2	Firewall_bridge	gw	Phase established		0x065e034a	0x088bd291	0x184f3e3a3f12...	initiator	10.0.0.128	10.2.36.0/24
14:16:30	Information	0			Reloading Isak...				/			
14:12:20	Information	2	Firewall_bridge	gw	Phase established		0x0280f034	0x036a66c6	0x184f3e3a3f12...	initiator	10.0.0.128	10.2.10.0/24
14:07:17	Information	2	Firewall_bridge	gw	Phase established		0x07753d52	0x0aa5da01	0x184f3e3a3f12...	initiator	10.0.0.128	10.2.8.0/24
14:07:09	Information	2	Firewall_bridge	gw	Phase established		0x01f54c1f	0x0cf53c72	0x184f3e3a3f12...	initiator	10.0.0.128	10.2.45.0/24
14:06:14	Information	2	Firewall_bridge	gw	Phase established		0x0c280568	0x0bdf493a	0x184f3e3a3f12...	initiator	10.0.0.128	10.2.32.0/24
14:04:39	Information	2	Firewall_bridge	gw	Phase established		0x0a0503ac	0x05cc6da4	0x184f3e3a3f12...	initiator	10.0.0.128	10.2.31.0/24
13:43:55	Information	2	Firewall_bridge	gw	Phase established		0x040d3535	0x0f52ee36	0x184f3e3a3f12...	initiator	10.0.0.128	10.2.38.0/24
13:40:52	Information	2	Firewall_bridge	gw	Phase established		0x053accc3	0x0626ab85	0x184f3e3a3f12...	initiator	10.0.0.128	10.2.39.0/24
13:40:33	Information	2	Firewall_bridge	gw	Phase established		0x01776705	0x0a6e00df	0x184f3e3a3f12...	initiator	10.0.0.128	10.2.27.0/24
13:37:52	Information	2	Firewall_bridge	gw	Phase established		0x020338e4	0x05d8fda5	0x184f3e3a3f12...	initiator	10.0.0.128	10.2.40.0/24
13:29:22	Information	2	Firewall_bridge	gw	Phase established		0x0b712ac0	0x074db963	0x184f3e3a3f12...	initiator	10.0.0.128	10.2.47.0/24
13:19:16	Information	2	Firewall_bridge	gw	Phase established		0x0686b3dc	0x07c26429	0x184f3e3a3f12...	initiator	10.0.0.128	10.2.8.0/24
13:19:08	Information	2	Firewall_bridge	gw	Phase established		0x0c1912ca	0x03b8ae95	0x184f3e3a3f12...	initiator	10.0.0.128	10.2.45.0/24
13:18:12	Information	2	Firewall_bridge	gw	Phase established		0x0b49d4a7	0x0bacb93f	0x184f3e3a3f12...	initiator	10.0.0.128	10.2.32.0/24
13:06:16	Information	2	Firewall_bridge	gw	Phase established		0x0e56c878	0x0f33e1fd	0x184f3e3a3f12...	initiator	10.0.0.128	10.2.17.0/24

Figure 56: VPN

The following data is displayed when you click on the **VPN** menu:

Date	Date and time the entry was generated
Error level	Error message
Phase	SA negotiation phase
Source	Connection source address (tunnel initiator).
Destination	Destination IP address or name
Message	Message informing of an attempt to set up a tunnel.
Peer identity	Identity of the peer indicated in pre-shared key configuration where "IP address" has not been specified as the identity type.
In SPI	SPI number of the negotiated incoming SA (in hexadecimal).
Out SPI	SPI number of the negotiated outgoing SA.
Cookie (incoming outgoing)	Temporary identity markers for the initiator and recipient of the negotiation.
Role	Indicates the user's endpoint.
Remote network	IP address of the remote network on the traffic endpoint.
Local network	IP address of the local network on the traffic endpoint.

7.2.2. System



```
Date       Service    Message
15:52:55   dns        cache cycle 13 times each day, based on last 60 minutes activity (7 times each day based on activity since first check (27 hours))
15:40:03   sysevent   Active Update: update successful Kaspersky
15:40:02   proxy      Sighup received, refresh config
14:52:52   dns        cache cycle 11 times each day, based on last 60 minutes activity (6 times each day based on activity since first check (26 hours))
14:18:54   proxy      Sighup received, refresh config
14:18:11   proxy      Sighup received, refresh config
14:16:32   proxy      Sighup received, refresh config
14:14:41   proxy      Sighup received, refresh config
13:52:52   dns        cache cycle 12 times each day, based on last 60 minutes activity (6 times each day based on activity since first check (25 hours))
13:43:59   proxy      Sighup received, refresh config
13:43:56   proxy      Sighup received, refresh config
13:39:54   proxy      Sighup received, refresh config
13:37:23   proxy      URLFiltering, profile 01: unable to load rule 8, bypass it
13:37:20   proxy      Sighup received, refresh config
13:36:57   proxy      URLFiltering, profile 01: unable to load rule 8, bypass it
13:36:54   proxy      Sighup received, refresh config
13:29:18   proxy      URLFiltering, profile 01: unable to load rule 8, bypass it
13:29:17   proxy      Sighup received, refresh config
12:52:51   dns        cache cycle 11 times each day, based on last 60 minutes activity (6 times each day based on activity since first check (24 hours))
12:40:03   sysevent   Active Update: update successful Kaspersky
12:40:02   proxy      Sighup received, refresh config
12:40:02   proxy      URLFiltering, profile 01: unable to load rule 8, bypass it
11:52:50   dns        cache cycle 15 times each day, based on last 60 minutes activity (6 times each day based on activity since first check (23 hours))
10:52:49   dns        cache cycle 13 times each day, based on last 60 minutes activity (5 times each day based on activity since first check (22 hours))
09:52:49   dns        cache cycle 15 times each day, based on last 60 minutes activity (5 times each day based on activity since first check (21 hours))
09:39:57   sysevent   Active Update: update successful Kaspersky
09:39:56   proxy      Sighup received, refresh config
09:39:56   proxy      URLFiltering, profile 01: unable to load rule 8, bypass it
09:33:36   HA         HA: HA link 172.16.100.5 is back online
09:33:14   HA         HA: HA link 172.16.100.5 is down (unexpected)
09:32:35   sld        Too many open connection from 10.2.6.42 (max 528) on sld daemon service
09:20:02   dhcp       DHCPACK on 10.60.4.4 to 00:50:56:b0:4f:9c (W7-PC) via eth10
```

Figure 57: System

The following data is displayed when you click on the **System** menu:

Date	Date and time entry was generated
Service	Name of the service
Message	Indicates the action applied.

APPENDICES

Appendix A: FAQ

1). what is the meaning of the message “Impossible to locate the machine on x.x.x.x”?
2). How can I check the IP address (es) really assigned to the Firewall?
3). what is the meaning of the message ‘You lost the MODIFY privilege’?
4). what is the meaning of the message ‘The operation has exceeded the allotted time’?
5). How do I know if there has been an attempted intrusion?
6). It is possible to allow protocols other than IP?

1) What is the meaning of the message “Impossible to locate the machine on x.x.x.x”?

This message means that the host on which you are connected cannot reach the Firewall by the IP address you have specified in the connection window. This may be for one of several reasons.

Check:

- That the IP address which you have specified in the connection window is that of the Firewall (that of the internal interface in advanced mode),
- That your host has indeed a different IP address from the Firewall but is on the same sub-network,
- That the connections are properly in place (use a crossover cable only if you are connecting the Firewall directly to a host or a router. Type "arp -a" in a DOS window under Windows to see if the PC recognizes the NETASQ Firewall’s physical address (Ethernet). If it doesn’t, check your cables and the physical connections to your hub…
- That you have not changed the Firewall’s operating mode (transparent or advanced),
- That the Firewall recognizes the IP address (see “How can I check the IP address (es) really assigned to the Firewall?”).
- That the access provider for the graphical interface has not been deactivated on the Firewall.

2) How can I check the IP address (es) really assigned to the Firewall?

If you wish to check the IP address (es) or the operating mode (transparent or advanced) you need only connect to the Firewall in console mode. To do so you can either conduct an SSH session on the Firewall (if SSH is active and authorized) or connect directly to the firewall by the serial port or by connecting a screen and a keyboard to the firewall.

Once connected in console mode (with the admin login) type the command ***ifinfo***. This will give you the network adapter configuration and the present operating mode.

3) What is the meaning of the message ‘You lost the MODIFY privilege’?

Only one user can be connected to the Firewall with the MODIFY privilege. This message means that a user has already opened a session with this privilege. In order to force this session to close, you need only connect, adding an exclamation mark before the user’s name (!admin).

WARNING

If an administrator session is open on another machine with the MODIFY right, it will be closed.

4) What is the meaning of the message ‘The operation has exceeded the allotted time’?

As a security measure any connection between the Firewall and the graphic interface is disconnected after a given time whether finished or not. In particular, this prevents an indefinite wait for a connection if the Firewall cannot be reached via the network.

5) How do I know if there has been an attempted intrusion?

Each attempted intrusion triggers a major or minor alarm, depending on its gravity and configuration. You are informed of these alarms in four ways:

- Firstly the LEDs on the front panel of the firewall light up (red) or flicker (yellow) to alert you.
- Then the alarms are logged in a specific file which you can consult from the graphical interface (**NETASQ REAL-TIME MONITOR** or **NETASQ EVENT REPORTER**),
- You can receive an alarm report at regular intervals (see *Receiving alarms*) via the NETASQ UNIFIED MANAGER application, which can be configured so that whenever an alarm is raised, an e-mail is sent. When several alarms are raised in a short period, they will be sent in a collective e-mail
- Finally **NETASQ REAL-TIME MONITOR** displays on the screen the alarms received in real time.

6) It is possible to allow protocols other than IP?

The NETASQ Firewall can only analyze IP-based protocols. All protocols that the Firewall does not analyze are regarded as suspicious and are blocked.

However, in transparent mode, Novell’s IPX, IPv6, PPPoE, AppleTalk and NetBIOS protocols may be allowed through even though they are not analyzed.

Appendix B: NETASQ log files

The treatment of traffic passing through Firewalls requires the generation of logs containing descriptions of all events that arose. Depending on the type of event encountered, these logs will be recorded in specific NETASQ log files.

There are 17 types of log files available on NETASQ firewalls: "Alarm", "Auth", "Connection", "Count", "Filter", "Monitor", "Natstat", "Plugin", "Filterstat", "Pop3", "Pvm", "Server", "Smtp", "System", "Vpn", "Web", "Xvpn".

The names used for these log files are rather self-explanatory. There are 7 in the Monitor section of events.

Alarm

Is used for alarms generated by ASQ in Firewalls (filter rules and “System” events which have a “minor” or “major” attribute are logged in this file), and its source is NETASQ’s IPS engine – ASQ,

> **Example**
> The Firewall’s ASQ logs an attempted FTP bounce on a server protected by the Firewall (this traffic is blocked by default and raises a minor alarm).

The information saved in this log file is as follows:

Identifier (Id)	Identifier (number) of the alarm on the firewall.
Date Time (time)	Date and time the line was recorded in the log file at the firewall’s local time. (**Example**: fri.9. march 15:46:04 2007).
Firewall (fw)	Serial number or name of the firewall (if known) that caused the event.
Timezone (tz)	Firewall’s timezone at the time the log was written.
Start date (starttime)	“Local” date at the start of an event.
Priority (pri)	Determines the alarm level. The possible values are: - 0: emergency - 1: alert - 2: critical - 3: error - 4: warning - 5: notice - 6: information - 7: debug
Rule (slotlevel)	Level of the filter rule (Local or Global).
Rule id (ruleid)	Rule number. Rules are numbered in order. This number allows uniquely identifying the rule within the filter slot that was involved in raising the alarm. (**Example**: 24).
Source interface (srcif/srcifname)	Name of the firewall interface on which the event was raised (source interface network card).
Source interface name	Name of the source interface (only if known).

(srcifname)	
IP (ipproto)	Internet protocol (tcp or udp).
Protocol (proto)	Protocol of the packet that set off the alarm.
Source (src/srcname)	IP address or name of the object corresponding to the source host of the packet that set off the alarm.
Source port (srcport/srcportname)	Source port number of the service or the name of the object corresponding to the service port of the source host (only if TCP/UDP).
Destination (dst/dstname)	IP address or name of the object corresponding to the destination host of the packet that set off the event.
Destination port (dstport)	Destination port number of the service or name of the object corresponding to the service port of the destination host if it exists and is requested for this connection.
Destination interface (dstif/dstifname)	Network card of the destination interface.
User	Identifier of the authenticated user (FTP), e-mail address of the sender (SMTP), identifier of the user if authentication has been enabled (WEB).
Action (action)	Action associated with the filter rule and applied on the packet (**Examples**: Block/Pass…)
ICMP code (icmpcode)	ICMP code in the alarm logs.
ICMP type (icmptype)	ICMP type in the alarm logs.
Message (Msg)	Detailed description of the alarm. All commands sent by the client are found here. Sensitive information such as passwords is removed.
Context (class)	Category to which the alarm belongs (E.g.: system, protocol, filter, etc).
Alarm type (classification)	Code (number) indicating the alarm category.
Packet (Pktlen)	Length of the captured network packet.
Packet (pktdumplen)	Length of the available network packet.
Packet (Pktdump)	Available network packet.
Identifier (Id)	Identifier (number) of the alarm.
Copy (repeat)	Indicates the number of an event's occurrences within a defined period. This period is configured in NETASQ UNIFIED MANAGER in the menu "`Logs\Advanced`", option **Write log duplicates every**.

Plugin

Identifier (Id)	Identifier (number) of the alarm on the firewall.
Date Time (time)	Date and time the line was recorded in the log file at the firewall's local time. (**Example**: fri.9. march 15:46:04 2007).
Firewall (fw)	Serial number or name of the firewall (if known) that caused the event.
Timezone (tz)	Firewall's timezone at the time the log was written.
Start date (starttime)	"Local" date at the start of an event.
Priority (pri)	Determines the alarm level. The possible values are: - 0: emergency - 1: alert - 2: critical - 3: error - 4: warning - 5: notice - 6: information - 7: debug

Rule (slotlevel)	Level of the filter rule (Local or Global).
Rule id (ruleid)	Rule number. Rules are numbered in order. This number allows uniquely identifying the rule within the filter slot that was involved in raising the alarm. (**Example**: 24).
Source interface (srcif/srcifname)	Name of the firewall interface on which the event was raised (source interface network card).
Source interface name (srcifname)	Name of the source interface (only if known).
IP (ipproto)	Internet protocol (tcp or udp).
Protocol (proto)	Protocol of the packet that set off the alarm.
Source (src/srcname)	IP address or name of the object corresponding to the source host of the packet that set off the alarm.
Source port (srcport/srcportname)	Source port number of the service or the name of the object corresponding to the service port of the source host (only if TCP/UDP).
Destination (dst/dstname)	IP address or name of the object corresponding to the destination host of the packet that set off the event.
Destination port (dstport/dstportname)	Destination port number of the service or name of the object corresponding to the service port of the destination host if it exists and is requested for this connection.
Destination interface (dstif/dstifname)	Network card of the destination interface.
User	Identifier of the authenticated user (FTP), e-mail address of the sender (SMTP), identifier of the user if authentication has been enabled (WEB).
Sent	Number of KB sent during the connection.
Received (rcvd)	Number of KB received during the connection.
Duration	Connection time in seconds.
Connection group (groupid)	Session identifier (link between commands and data transfer).
Operation (op)	Identified command of the protocol. - FTP: PUT, MPUT, GET, DELETE,… - HTTP: GET, PUT, POST,… - EDONKEY: SENDPART - POP3: RETR, LIST,… - FTP: DELETE, LIST,…
Result	Result of the operation in the protocol (example: 404 which indicates an error).
Parameter (arg)	Action obtained (example: /gi-bin/uploadjs.cgi/).
Caller	VoIP: Indicates the caller
Callee	VoIP: Indicates the callee
Media	Type of traffic detected (audio, video, application,…)

Connection

Is used for connections made to and from the Firewall, and its source is NETASQ's IPS engine – ASQ,

> **Example :** The Firewall's ASQ kernel logs the connection from the host 192.168.0.2 and from port 1672 to the host 192.168.1.2 to port 1840.

The information saved in this log file is as follows:

Identifier (Id)	Identifier of the entity that caused the entry to be written. This field always takes on the value "firewall".
Date Time (time)	Date and time the line was recorded in the log file at the firewall's local time. (**Example**: fri.9. march 15:46:04 2007).
Firewall (fw)	Serial number or name of the firewall (if known) that caused the event.
Timezone (tz)	Firewall's timezone at the time the log was written.
Start date (starttime)	"Local" date at the start of an event.
Priority (pri)	Determines the alarm level. The possible values are: - 0: emergency - 1: alert - 2: critical - 3: error - 4: warning - 5: notice - 6: information - 7: debug
Rule (slotlevel)	Level of the filter rule (Local or Global).
Rule id (ruleid)	Rule number. Rules are numbered in order. This number allows uniquely identifying the rule within the filter slot that was involved in raising the alarm. (**Example**: 24).
User	Identifier of the authenticated user (FTP), e-mail address of the sender (SMTP), identifier of the user if authentication has been enabled (WEB).
Source interface (srcif/srcifname)	Name of the firewall interface on which the event was raised (source interface network card).
Source interface name (srcifname)	Name of the source interface (only if known).
IP (ipproto)	Internet protocol (tcp or udp).
Destination interface (dstif/dstifname)	Network card of the destination interface.
Protocol (proto)	Protocol of the packet that set off the alarm.
Source (src/srcname)	IP address or name of the object corresponding to the source host of the packet that set off the alarm.
Source port (srcport/srcportname)	Source port number of the service or the name of the object corresponding to the service port of the source host (only if TCP/UDP).
Destination (dst/dstname)	IP address or name of the object corresponding to the destination host of the packet that set off the event.
Destination port (dstport/dstportname)	Destination port number of the service or name of the object corresponding to the service port of the destination host if it exists and is requested for this connection.
Sent	Number of KB sent during the connection.
Received (rcvd)	Number of KB received during the connection.
Duration	Connection time in seconds.
Identifier (Id/alarmid)	Indicates the number of the alarm.

Web

Identifier (Id)	Identifier of the entity that caused the entry to be written. This field always takes on the value “firewall”.
Date Time (time)	Date and time the line was recorded in the log file at the firewall’s local time. (**Example**: fri.9. march 15:46:04 2007).
Firewall (fw)	Serial number or name of the firewall (if known) that caused the event.
Timezone (tz)	Firewall’s timezone at the time the log was written.
Start date (starttime)	“Local” date at the start of an event.
Priority (pri)	Determines the alarm level. The possible values are: - 0: emergency - 1: alert - 2: critical - 3: error - 4: warning - 5: notice - 6: information - 7: debug
Rule id (ruleid)	Rule number. Rules are numbered in order. This number allows uniquely identifying the rule within the filter slot that was involved in raising the alarm. (**Example**: 24).
Protocol (proto)	Protocol of the packet that set off the alarm.
Source (src/srcname)	IP address or name of the object corresponding to the source host of the packet that set off the alarm.
Source port (srcport/srcportname)	Source port number of the service or the name of the object corresponding to the service port of the source host (only if TCP/UDP).
Destination (dst/dstname)	IP address or name of the object corresponding to the destination host of the packet that set off the event.
Destination port (dstport/dstportname)	Destination port number of the service or name of the object corresponding to the service port of the destination host if it exists and is requested for this connection.
User	Identifier of the authenticated user (FTP), e-mail address of the sender (SMTP), identifier of the user if authentication has been enabled (WEB).
Action (action)	Action associated with the filter rule and applied on the packet (**Examples**: Block/Pass…)
Message (Msg)	Detailed description of the alarm. All commands sent by the client are found here. Sensitive information such as passwords is removed.
Sent	Number of KB sent during the connection.
Received (rcvd)	Number of KB received during the connection.
Duration	Connection time in seconds.
Operation (op)	Identified command of the protocol. - FTP: PUT, MPUT, GET, DELETE,… - HTTP: GET, PUT, POST,… - EDONKEY: SENDPART - POP3: RETR, LIST,… - FTP: DELETE, LIST,…
Result	Result of the operation in the protocol (example: 404 which indicates an error).
Parameter (arg)	Action obtained (example: /gi-bin/uploadjs.cgi/).
Virus (virus)	Indicates whether there is a virus (if the antivirus has been enabled).
Category (cat_site)	Web category of the requested website.

SMTP

Identifier (Id)	Identifier of the entity that caused the entry to be written. This field always takes on the value "firewall".
Date Time (time)	Date and time the line was recorded in the log file at the firewall's local time. (**Example**: fri.9. march 15:46:04 2007).
Firewall (fw)	Serial number or name of the firewall (if known) that caused the event.
Timezone (tz)	Firewall's timezone at the time the log was written.
Start date (starttime)	"Local" date at the start of an event.
Priority (pri)	Determines the alarm level. The possible values are: - 0: emergency - 1: alert - 2: critical - 3: error - 4: warning - 5: notice - 6: information - 7: debug
Protocol (proto)	Protocol of the packet that set off the alarm.
Source (src/srcname)	IP address or name of the object corresponding to the source host of the packet that set off the alarm.
Source port (srcport/srcportname)	Source port number of the service or the name of the object corresponding to the service port of the source host (only if TCP/UDP).
Destination (dst/dstname)	IP address or name of the object corresponding to the destination host of the packet that set off the event.
Destination port (dstport/dstportname)	Destination port number of the service or name of the object corresponding to the service port of the destination host if it exists and is requested for this connection.
User	Identifier of the authenticated user (FTP), e-mail address of the sender (SMTP), identifier of the user if authentication has been enabled (WEB).
Action (action)	Action associated with the filter rule and applied on the packet (**Examples**: Block/Pass…)
Message (Msg)	Detailed description of the alarm. All commands sent by the client are found here. Sensitive information such as passwords is removed.
Sent	Number of KB sent during the connection.
Received (rcvd)	Number of KB received during the connection.
Duration	Connection time in seconds.
Spam level (spamlevel)	Spam level: 0 (Message not spam) 1,2 and 3 (spam) x (error during the treatment of the message) and ? (the nature of the message could not be determined) if antispam has been enabled.
Virus (virus)	Indicates whether there is a virus in the e-mail. Some of the possible values are "clean" and "infected".

FTP

Identifier (Id)	Identifier of the entity that caused the entry to be written. This field always takes on the value “firewall”.
Date Time (time)	Date and time the line was recorded in the log file at the firewall’s local time. (**Example**: fri.9. march 15:46:04 2007).
Firewall (fw)	Serial number or name of the firewall (if known) that caused the event.
Timezone (tz)	Firewall’s timezone at the time the log was written.
Start date (starttime)	“Local” date at the start of an event.
Priority (pri)	Determines the alarm level. The possible values are: - 0: emergency - 1: alert - 2: critical - 3: error - 4: warning - 5: notice - 6: information - 7: debug
Protocol (proto)	Protocol of the packet that set off the alarm.
Source (src/srcname)	IP address or name of the object corresponding to the source host of the packet that set off the alarm.
Source port (srcport/srcportname)	Source port number of the service or the name of the object corresponding to the service port of the source host (only if TCP/UDP).
Destination (dst/dstname)	IP address or name of the object corresponding to the destination host of the packet that set off the event.
Destination port (dstport/dstportname)	Destination port number of the service or name of the object corresponding to the service port of the destination host if it exists and is requested for this connection.
User	Identifier of the authenticated user (FTP), e-mail address of the sender (SMTP), identifier of the user if authentication has been enabled (WEB).
Action (action)	Action associated with the filter rule and applied on the packet (**Examples**: Block/Pass…)
Message (Msg)	Detailed description of the alarm. All commands sent by the client are found here. Sensitive information such as passwords is removed.
Sent	Number of KB sent during the connection.
Received (rcvd)	Number of KB received during the connection.
Duration	Connection time in seconds.
Connection group (groupid)	Session identifier (link between commands and data transfer).
Operation (op)	Identified command of the protocol. - FTP: PUT, MPUT, GET, DELETE,… - HTTP: GET, PUT, POST,… - EDONKEY: SENDPART - POP3: RETR, LIST,… - FTP: DELETE, LIST,…
Parameter (arg)	Action obtained (example: /gi-bin/uploadjs.cgi/).
Virus (virus)	Indicates whether there is a virus in the e-mail. Some of the possible values are “clean” and “infected”.

POP3

Identifier (Id)	Identifier of the entity that caused the entry to be written. This field always takes on the value “firewall”.
Date Time (time)	Date and time the line was recorded in the log file at the firewall’s local time. (**Example**: fri.9. march 15:46:04 2007).
Firewall (fw)	Serial number or name of the firewall (if known) that caused the event.
Timezone (tz)	Firewall’s timezone at the time the log was written.
Start date (starttime)	“Local” date at the start of an event.
Priority (pri)	Determines the alarm level. The possible values are: - 0: emergency - 1: alert - 2: critical - 3: error - 4: warning - 5: notice - 6: information - 7: debug
Protocol (proto)	Protocol of the packet that set off the alarm.
Source (src/srcname)	IP address or name of the object corresponding to the source host of the packet that set off the alarm.
Source port (srcport/srcportname)	Source port number of the service or the name of the object corresponding to the service port of the source host (only if TCP/UDP).
Destination (dst/dstname)	IP address or name of the object corresponding to the destination host of the packet that set off the event.
Destination port (dstport/dstportname)	Destination port number of the service or name of the object corresponding to the service port of the destination host if it exists and is requested for this connection.
User	Identifier of the authenticated user (FTP), e-mail address of the sender (SMTP), identifier of the user if authentication has been enabled (WEB).
Action (action)	Action associated with the filter rule and applied on the packet (**Examples**: Block/Pass…)
Message (Msg)	Detailed description of the alarm. All commands sent by the client are found here. Sensitive information such as passwords is removed.
Sent	Number of KB sent during the connection.
Received (rcvd)	Number of KB received during the connection.
Duration	Connection time in seconds.
Operation (op)	Identified command of the protocol. - FTP: PUT, MPUT, GET, DELETE,… - HTTP: GET, PUT, POST,… - EDONKEY: SENDPART - POP3: RETR, LIST,… - FTP: DELETE, LIST,…
Spam level (spamlevel)	Spam level: 0 (Message not spam) 1,2 and 3 (spam) x (error during the treatment of the message) and ? (the nature of the message could not be determined) if antispam has been enabled.
Virus (virus)	Indicates whether there is a virus in the e-mail. Some of the possible values are “clean” and “infected”.

Filter

Is used for filter-generated logs (an entry is recorded each time a filter rule set to "Log" applies to the traffic passing through the Firewall), and its source is NETASQ's IPS engine – ASQ:

> **Example :** The Firewall's ASQ kernel logs the event of filter rule 3 (which has been set to "Log") being used for the treatment of a packet passing through the Firewall.

The information saved in this log file is as follows:

Identifier (Id)	Identifier of the entity that caused the entry to be written. This field always takes on the value "firewall".
Date Time (time)	Date and time the line was recorded in the log file at the firewall's local time. (**Example**: fri.9. march 15:46:04 2007).
Firewall (fw)	Serial number or name of the firewall (if known) that caused the event.
Timezone (tz)	Firewall's timezone at the time the log was written.
Start date (starttime)	"Local" date at the start of an event.
Priority (pri)	Determines the alarm level. The possible values are: - 0: emergency - 1: alert - 2: critical - 3: error - 4: warning - 5: notice - 6: information - 7: debug
Rule (slotlevel)	Type of filter rule: implicit (0), global (1) or even local (2).
Rule ID (ruleid)	Rule number. Rules are numbered in order. This number allows uniquely identifying the rule within the filter slot that was involved in raising the alarm. (**Example**: 24).
User	Identifier of the authenticated user (FTP), e-mail address of the sender (SMTP), identifier of the user if authentication has been enabled (WEB).
Source interface (srcif/srcifname)	Name of the firewall interface on which the event was raised (source interface network card).
Protocol (proto)	Protocol of the packet that set off the alarm.
Source (src/srcname)	IP address or name of the object corresponding to the source host of the packet that set off the alarm.
Source port (srcport/srcportname)	Source port number of the service or the name of the object corresponding to the service port of the source host (only if TCP/UDP).
Destination (dst/dstname)	IP address or name of the object corresponding to the destination host of the packet that set off the event.
Destination port (dstport/dstportname)	Destination port number of the service or name of the object corresponding to the service port of the destination host if it exists and is requested for this connection.
Destination name (dstname)	Name of the destination (only if known).
Destination interface (dstif/dstifname)	Network card of the destination interface.
User	Identifier of the authenticated user (FTP), e-mail address of the sender (SMTP), identifier of the user if authentication has been enabled (WEB).
Action (action)	Action associated with the filter rule and applied on the packet (**Examples**: Block/Pass…)
ICMP code (icmpcode)	ICMP code in the alarm logs.
ICMP type (icmptype)	ICMP type in the alarm logs.

Format of log files

Log files are text files. A log corresponds to a line ending with the characters CR (Carriage Return, or OD in hexadecimal) and LF (Line Feed, or 0A in hexadecimal).
The lines are in WELF format.

Blocked packets and allowed packets

In each log line, it is important to locate the “Action” token, as it enables identifying packets which have been allowed (by the filter policy or because they had not been blocked by the ASQ analyses) when the “Action” has been set to “Pass”, and packets which have been blocked (which are either uneventfully deleted by the Firewall or deleted after a reinitialization has been sent to the packet’s source host – this information is not available to Firewall administrators) when the “Action” has been set to “Block”.

Logs regarding the change of time on firewalls

When the Firewall’s time is reset, a special line will be written in all log files, according to the example below:

```
id=firewall time="2003-12-29 16:35:32"fw="U700XXA0Z0899020"tz=+0100
startime="2003-12-29 16:30:10"datechange=1 duration=322
```

The “datechange=1” token means that the time was reset and “duration” refers to the lag in seconds.

Exceptions on tokens

Certain log files do not exactly follow the WELF format. These exceptions will be listed in the following section.

Exceptions that are common to all logs

- “Rule” is replaced with “ruleid”,
- The “time” token refers to the time (firewall’s local time) at which the line in the log file was saved,
- “Tz” indicates the time difference from the firewall’s time at the moment the log was written. Therefore it is possible to find out the time of the log in international time and to analyze attacks launched simultaneously on equipment in different countries,
- “Startime” states the time at which a connection started. If the connection lasts for an hour, the “time” would be roughly equal to “startime” plus one hour,
- “Groupid” The FTP plugin indicates a number that is found for all FTP child connections,
- “Dstif”, “srcif”, “dstifname”, and “srcifname” refer to the firewall’s source and destination interfaces with their names,
- “User” in several logs corresponds the names of persons authenticated via “authd”,
- “Icmptype” and “icmpcode” correspond respectively to the ICMP type and code in alarm logs.

SYSTEM log

Proxies also write events particular to their operation in this log.

- "Service" corresponds to the name of the writing service.
- "Msg" explains the action of the service that generated this log.

Appendix C: Session and user privileges

Name	Description	Assigned privileges
Logs (R)	Logs consultation	base, log_read
Filter (R)	Filtering policy consultation	base, filter_read
VPN (R)	VPN configuration consultation	base, vpn_read
Logs (W)	Privilege to modify logs configuration	modify, base, log
Filter (W)	Privilege to modify filtering policy configuration	modify, base, filter
VPN (W)	Privilege to modify VPN configuration	modify, base, vpn
Monitoring	Privilege to modify configuration from NETASQ Realtime Monitor	modify, base, mon_write
Content filtering	Privilege for URL filtering, Mail, SSL and antivirus management	modify, base, contentfilter
PKI	Privilege to modify PKI	modify, base, pki
Objects	Privilege to modify Object database	modify, base, object
Users	Privilege to modify Users	modify, base, user
Network		modify, base, network
Routing	Privilege to modify routing (default route, static routes and trusted networks)	modify, base, route
Maintenance	Privilege to perform maintenance operations (backups, restorations, updates, Firewall shutdown and reboot, antivirus update, modification of antivirus update frequency, High Availability modification and RAID-related actions in NETASQ Realtime Monitor)	modify, base, maintenance
Intrusion prevention	Privilege to modify Intrusion prevention (IPS) configuration	modify, base, asq
Vulnerability Manager	Privilege to consult or modify vulnerabilities	modify, base, pvm
Objects (global)	Privilege to access to global objets	modify, base, globalobject
Filter (global)	Privilege to access to global filtering policy	modify, base, globalfilter

The *base* privilege is assigned to all users systematically. This privilege allows reading the whole configuration except filtering, VPN, logs and content filtering.

The *modify* privilege is assigned to users who have writing privileges.

The user who has logged on as *admin* will obtain the *admin* privilege. This is the only privilege that allows giving other users administration privileges or removing them.

Appendix D: SA states

-	Undetermined
Larval	The SA is in the process of being negotiated or has not been completely negotiated.
Mature	The SA has been established and is available; the VPN tunnel has been correctly set up.
Dying	The SA will soon expire; A new SA is in the progress of being negotiated.
Dead	The SA has expired and cannot be used; The tunnel has not been set up and is therefore no longer active.
Orphan	A problem has arisen, in general this status means that the tunnel has been set up in only one direction.

Appendix E: Sort criteria

For each menu in NETASQ REAL-TIME MONITOR, a “Column” field will enable sorting. The sorting criteria vary according to the menu

Overview

- Auto connection
- Read only
- Status
- Name
- Address
- User
- Model
- Firmware
- Active Update
- VULNERABILITY MANAGER
- Antivirus
- Backup version
- Latest alarms
- Vulnerabilities
- Global filter
- Filter
- VPN
- URL
- NAT
- Uptime
- Session
- Comments

Event

- Firewall
- Date
- UTC Date
- Start date
- UTC Start date
- Timezone
- Logs
- Action
- Priority
- Rule
- User
- Protocol
- Connection group
- Source interface
- Source
- Source address
- Source port
- Destination interface
- Destination
- Destination address
- Destination port
- Details
- Sensitive alarm
- Copy
- ID
- Context
- Alarm type
- Caller
- Callee
- Duration
- Data sent
- Data received
- Operation
- Result
- Parameter
- Category
- Spam level
- Virus
- IP
- Media
- Message
- ICMP Code
- ICMP Type

Vulnerability manager

- Data source
- Severity
- Name
- Affected hosts
- Family
- Target
- Exploit
- Solution
- Release
- ID

Machines

- Name
- Address
- Users
- Operating system
- Vulnerabilities
- Applications
- Infos
- Open ports
- Last vulnerability manager event
- Interface
- Incoming bytes
- Outgoing bytes
- Incoming throughput
- Outgoing throughput

Interfaces

- Name
- Type
- Address/Mask
- Incoming throughput
- Outgoing throughput
- Connections
- Media
- Bandwidth
- Stats

Quality of service

- QID
- Incoming throughput
- Outgoing throughput
- Incoming packets
- Outgoing packets
- Rejected incoming packets
- Rejected outgoing packets
- Incoming bytes
- Outgoing bytes

Users

- Firewall
- Name
- Group
- Address
- Expiry

Quarantine – ASQ Bypass

- Addresses
- Type
- Expiration

VPN Tunnels

- Source
- Source address
- Bytes
- Destination
- Destination address
- Status
- Lifetime
- Authentication
- Encryption
- Spi Out
- Spi In
- Reqid Out
- Reqid In

Active Update

- Status
- Name
- Last update
- License expiry

Services

- Status
- Name
- Uptime
- Version
- Last update
- License expiry

VPN Policy

- Source
- Source address
- Source router
- Src. Gateway addr.
- Direction
- Protocol
- Destination router
- Dest. Gateway addr.
- Destination
- Destination address
- Level
- Max. lifetime
- Negotiated SAs

VPN

- Date
- Error level
- Phase
- Source
- Source address
- Destination
- Destination address
- Message
- Identity of remote peer
- Spi Out
- Spi In
- Cookie (incoming/outgoing)
- Role
- Remote network
- Local network

System

- Date
- Service
- Message

Appendix F: The Details column in the Events menu

The “Details” column seen in the `Events` menu groups information relating to the type of log. The detail may be related to alarm, connection VoIP, web, mail, FTP or even filter logs.

The “Details” column groups in a single column information visible in other columns.

Alarm

- Sensitive alarm (sensitive)
- Copy (repeat): number of copies of the event groups in the event line
- Slotlevel: indicates whether the log had been started by an implicit (0), global (1) or local (2) rule
- Rule (Ruleid): identifier of the rule that set off the log.

Connection

- Sent: amount of data sent
- Received (rcvd): amount of data received
- Duration: duration of the connection

VoIP

- (caller-callee): Caller – Callee
- Sent: amount of data sent
- Received (rcvd): amount of data received
- Duration: duration of the connection

WEB

- Message (msg): detailed description of the alarm. All commands sent by the client are found here. Sensitive information such as passwords is removed.
- Website category (cat_site)
- Antivirus scan message
- Sent: amount of data sent
- Received (rcvd): amount of data received
- Duration: duration of the connection

MAIL

- Message (msg): detailed description of the alarm. All commands sent by the client are found here. Sensitive information such as passwords is removed.
- Antivirus scan message
- SPAM level (spamlevel): Spam level: 0 (Message not spam) 1,2 and 3 (spam) x (error during the treatment of the message) and ? (the nature of the message could not be determined) if antispam has been enabled.
- Sent: amount of data sent
- Received (rcvd): amount of data received
- Duration: duration of the connection

FTP

- Message (msg): detailed description of the alarm. All commands sent by the client are found here. Sensitive information such as passwords is removed.
- Antivirus scan message
- Sent: amount of data sent
- Received (rcvd): amount of data received
- Duration: duration of the connection

Filter

- Message
- Slotlevel: indicates whether the log had been started by an implicit (0), global (1) or local (2) rule
- Rule (Ruleid): identifier of the rule that set off the log.

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