

Readme for Copfilter 0.1.0 beta and Copfilter 0.80 stable

Copfilter

An add-on

for the

IPCop Firewall

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Copfilter - a Virus and Spam filtering IPCop add-on

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Introduction

Copfilter's main goal is to provide a free and easy to use solution to filter and scan traffic from any insecure network, like the internet, for Viruses and Spam. It has been designed as a preconfigured and easy to install add-on for an IPCop firewall.

Copfilter is a package of various Open Source traffic filtering software and tools, customized and built to work together smoothly. All included proxies filter traffic transparently, which means that no client reconfiguration is necessary.

It scans POP3 and SMTP emails for Viruses and Spam. Instead of a Virus infected emails, users will receive Virus notification messages containing details about the originally sent emails, which can also be quarantined if desired.

Spam emails will be tagged as Spam by inserting the following text into the subject field: *** Spam ***

With this procedure any email client will be able to use its own message filtering rules to automatically delete or move these Spam messages into a different folder for a later review.

HTTP and FTP traffic will also be scanned for Viruses. If a Virus is found, access to that web page or file will be denied.

IPCop Firewall

IPCop is an Open Source Linux Firewall Distribution project. Its main goal is to provide a secure and stable Firewall, which is easy to configure and maintain. IPCop has a web interface and it provides easy upgrade and patch management.

Depending on the used hardware and user experience, IPCop can be installed and configured in a matter of about 15 minutes or less.

Main IPCop features:

- Secure, stable and highly configurable Linux based firewall
- Runs on Uni- and Multi-processor systems
- IPTables based firewall
- Build system uses LFS (Linux from Scratch)
- Easy configuration through the Web-based GUI Administration System (ssl secured)
- CPU/Memory/Disk/Traffic Graphs, System/Proxy/Firewall Logs



IPCop Linux Updates Area

Backup/restore configuration Built with ProPolice to prevent stack smashing attacks in all applications. -Multiple language support HTTP Web Proxy (Squid) to speed up web access SSH server for Remote Access -DHCP server - provides dhcp services to its clients NTP Server - provides time services to its clients Caching DNS to help speed up Domain Name queries -Intrusion detection (Snort) to detect external attacks on your network IPSec based VPN Support (FreeSWAN) with x509 certificates Traffic Shaping capabilities to prioritize network traffic -- TCP/UDP port forwarding Port Address Translation which is a type of Network Adress Translation (NAT) http://de.wikipedia.org/wiki/Network_Address_Translation DMZ Pinhole support -Dynamic DNS Support (dyndns.org, no-ip.com, zoneedit.com,..) Interface Support - up to 4 network adapters, partitioning your network into 4 zones GREEN - internal safe network which is protected from the Internet BLUE - wireless network for WLAN clients ORANGE - DMZ (demilitarized zone) for publicly accessible servers, partially protected from the Internet - internet unsafe network RED ISP External **RED** interface supports Analog/ISDN/ADSL modem Supports PPP, PPTP, PPPoE, Ethernet DHCP client - IPCop is able to obtain its IP address from your ISP For more information please visit the IPCop website at http://www.IPCop.org. An installation manual can be found at http://www.IPCop.org/1.4.0/en/install/html. Network diagram: Workstation Clients IPCop Firewall Internet Servers with Copfilter SMTF POP3 Wireless Clients нттр DMZ Machines (Example: SMTP Server for incoming emails)

IPCop review in german: <u>http://www.heise.de/security/artikel/38011</u>



Copfilter Features

Email Scanning

- Virus and Spam scanning of incoming POP3 emails
- Virus and Spam scanning of incoming and outgoing SMTP emails
- Email sanitizing by removing dangerous html tags from HTML email messages
- Attachment scanning by renaming dangerous attachments (.pif .vbs ..) from email messages
- Adds a note to every email header indicating that the email was scanned
- Email discarding and/or quarantining, depending on a predefined Spam score level or if a Virus was found

Internet traffic Scanning

- Virus scanning of HTTP traffic, with no "trickle" effect, but continuous, nonblocking downloads
- Virus scanning of FTP traffic, with "trickle effect", a download delay is noticeable (file gets downloaded and scanned in the background, while browser only receives a few bytes until complete file has been scanned)
- Removes ads, banners, pop-ups and other obnoxious Internet junk from HTTP Traffic

Network

- All services work transparently, no re-configuration on any client is necessary !!
- Highly configurable, scanning can be turned on or off for every attached network
- Any type of email client (Outlook, Thunderbird, Evolution,..) on any OS (Win32, Linux, MacOS,..) can be used
- (RED) IP Alias support for mail server MX entries other than the default assigned ip address

Monitoring

- Detailed information about every installed service (CPU/Memory usage, uptime etc.)
- Service monitoring, if a service should fail, it will automatically be restarted (with email notification)
- Individual Service control start/stop every services from the monitoring Web GUI

Administration and Management

- Copfilter AntiSpam Whitelist management through Web GUI and by sending an email (with pre-defined commands) (spam scanning will be skipped on the reply emails)
- Automatic outgoing email whitelisting, adds recipient (To: field) email address of outgoing email to the Whitelist, if a reply email to the original email arrives, Spam scanning will be skipped
- Copfilter Daily Spam Digest recipient management through Web GUI
- Ability to automatically download Spam and ham emails from an IMAP folder to train the integrated Bayesian filter (dramatically improves Spam recognition, important for false positives and false negatives)
- HTTP Whitelist management through a configuration file
- Uninstall, backup, restore and restore-to-default-configuration capability
- Virus and Spam Quarantine, option to resend, delete messages and/or add the sender email address to the Whitelist
- Customizable levels of when email messages should be quarantined or discarded
- Ability to send test Virus/spam/bad attachment emails directly from the Web GUI to test Copfilter functionality



- Links to test HTTP and FTP Viruses are included as well
- Copfilter installation and configuration can be done in less than 5 minutes. Just copy the installation file to the IPCop firewall, extract and execute the included install script (no IPCop addon server required)
- Based on the Linux Firewall Distribution IPCop which is very easy to install. Download the Iso-Image, burn the CD, answer a few screens and your new firewall is up and running in less than 15 minutes!
- Detailed documentation
- Ease to use and highly configurable Web-based graphical user interface (Web GUI)
- Free, Open Source and GPL licensed :-)

Updates

- Automatic AntiVirus signature updates
- Automatic AntiSpam ruleset updates
- Latest available Copfilter version is displayed in the Web GUI (Web GUI retrieves this information by reading the http://www.copfilter.org website)

User Notifications emails

- Instead of a Virus infected email, the user receives a notification that a Virus infected email has been sent to him, including details like sender, subject, email header, etc of the original message
- Optionally sends a copy of these user notifications to an administrator
- All Spam messages will be tagged in the subject: *** Spam *** for further client processing
- Daily digest containing all sender email addresses of all received Spam in 24h, optionally a user can send an email to automatically add an email address to the Whitelist

Email Reports (for the System Administrator)

about

- Virus signature updates
- Antispam ruleset updates
- IMAP BAYES Training results
- Failed services and if the automatic restart has been successful

Software

- Only uses Open Source software (except for optional Virus scanner F-Prot)
- Enhanced Spam capabilities: Bayesian filtering, Spam Rulesets, Razor, Dcc, SURBL and DNS Blocklists
- Is able to use an open source AND/OR a commercial Virus scanner (for POP3/SMTP/FTP: ClamAV and/or F-Prot for HTTP: ClamAV only)
- All proxies run as a non-root user
- Init scripts included which can start/stop/reconfigure the proxies (some can be started in debug mode)
- Log directory with log files from all services (accessible through Web GUI)
- Supports multi languages based on the IPCop language setting languages available depends on translations which have been already done



Licensing

Copfilter is licensed under the terms of the GNU General Public License Version (GPL). Its documentation is licensed under terms of the GNU Free Documentation License Version (GFDL).

- GNU General Public License Version 2, June 1991 http://www.gnu.org/copyleft/gpl.html
- Inofficial German translation
 http://www.gnu.de/gpl-ger.html
- GNU Free Documentation License Version 1.2, November 2002
 http://www.gnu.org/copyleft/fdl.html
- Inofficial German translation (Version 1.1)
 http://nautix.sourceforge.net/docs/fdl.de.html

Security

From a security point of view, adding filters, Virus scanners and proxies to the firewall will highly reduce the firewall's overall security. Every additional application or software on a firewall could be a potential security hole. That's why the main target audience for Copfilter is the average home user or a smaller business with a lower demand on security than a huge corporate network serving hundreds of clients, although depending on their security requirements, Copfilter may serve them as well.

Copfilter is is NOT an official IPCop Add-on. It has not been approved or reviewed by the IPCop development team. It comes with NO warranty or guarantee, so it should be used at everyone's own risk. Copfilter adds firewall rules, proxies, filters and Virus scanners to the IPCop machine, which reduces security! I am sure that there are lots of ways to break Copfilter, so if security is an issue, it should NOT be used.

Requirements

Software:

IPCop version 1.4.x

Hardware (recommended minimum hardware):

- a CPU with 350 Mhz, 256MB RAM
- if no Spam filtering is used then a machine with 128MB RAM should be sufficient

If a faster machine is being used, email scanning and traffic filtering will be faster as well.

Short description of the software is being used within Copfilter

P3Scan	- a transparent POP3 Proxy server
ProxSMTP	- a transparent SMTP Proxy server
HAVP	- a transparent HTTP Proxy server (HTTP Antivirus Proxy)
	with continuous, non-blocking downloads and smooth scanning of dynamic and password protected HTTP traffic
Frox	- a transparent FTP Proxy server
Privoxy	 - a HTTP Proxy with advanced filtering capabilities for protecting privacy, managing cookies, controlling access, and removing ads, banners, pop-ups and other obnoxious Internet junk



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Clam AntiVirus	 a GPL Virus scanner with built-in support for Zip, Gzip, Bzip2 and automatic updating
F-Prot Antivir	- for Linux Workstations (free for home users), Virus scanner is not included, but supported!
F-Prot Antivir	- for x86 Mail Servers (corporate use) this Virus scanner is not included, but supported!
Spam Assassin	- a mail filter to identify Spam
Vipul's Razor	- a distributed, collaborative, Spam detection and filtering network, used by Spam Assassin
DCC	- a cooperative, distributed system intended to detect "bulk" mail
Renattach	 a stream filter that can identify and rename potentially dangerous e-mail attachments
RulesDuJour	- a bash script which automatically downloads new versions of Spam Assassin rulesets
Monit	- Monitoring Utility - automatically restarts a failed service, includes a service manager

Software versions as of this writing

Main programs

P3Scan	POP3 Proxy	2.1.99dev http://p3scan.sourceforge.net
ProxSMTP	SMTP Proxy	1.2.1 http://memberwebs.com/nielsen/software/proxsmtp
HAVP	HTTP Proxy	0.69 http://havp.sourceforge.net
Frox	FTP Proxy	0.7.18 http://frox.sourceforge.net
Privoxy	Webfilter	3.0.3 http://www.privoxy.org
Spam Assassin	Spamtool	3.0.4 http://www.spamassassin.org

Tools used by the Main programs

RulesDuJour	Bash script	1.21 http://www.exit0.us/index.php?pagename=RulesDuJour
Webuserprefs	Web GUI	0.6 http://sourceforge.net/projects/webuserprefs
РНР	Scripting language	4.4.0 http://www.php.net
Razor	Spam tool	2.75 http://razor.sourceforge.net
Dcc	Spam tool	1.3.12 http://www.rhyolite.com/anti-spam/dcc
Renattach	Attachment renamer	1.2.2 http://www.pc-tools.net/unix/renattach



P3Pmail	Mail sanitizer	1.3 http://p3scan.sourceforge.net/#p3pmail		
Anomy	Mail sanitizer	1.70 http://mailtools.anomy.net		
Ripmime	Mail ripper	1.4.0.5 http://www.pldaniels.com/ripmime		
Formail	Mail formatter	1.102 http://www.procmail.org		
ClamAV	Virus scanner	0.86.2 http://clamav.sourceforge.net		
F-Prot	Virus scanner	4.6.0		
Home use Corporate use Prices	http://www.f-pi http://www.f-pi http://www.f-pi	rot.com/products/home_use/linux rot.com/products/corporate_users/unix/linux/mailserver.html rot.com/products/prices/price_unix_ms.html		
Clients				
Fetchmail	POP3 client	6.2.5 http://www.catb.org/~esr/fetchmail/		
SMTPclient	SMTP client	1.0.0 <u>ftp://ftp.ossp.org/pkg/tool/smtpclient/smtpclient-</u> <u>1.0.0.tar.gz</u>		
SendEmail	SMTP client	1.42 <u>http://caspian.dotconf.net/menu/Software/SendEmail</u> (+ auth patch)		
Wget	HTTP download tool	1.9.1 http://www.gnu.org/software/wget/wget.html		
Ncftpget	FTP client	3.1.9 http://www.ncftpd.com		
Test files				
Eicar	Test Virus	http://www.eicar.com		
Email address a	and Website			
Website: Email address: Support email:		http://www.copfilter.org <u>copfilter@gmx.net</u> <u>copfilter-main@lists.sourceforge.net</u>		
Please do not form (<u>copfilte</u> Spam mail, than	publish my emai er-main@lists.so nks!	l address online like in forums, boards, except in the urceforge.net) presented above. This helps reduce my		



Installation

The Copfilter installation and Web GUI language will be the same as what you in the IPCop Web GUI, so if you want a different language change this settings in System -> GUI Settings

Preparation

- Enable SSH on your IPCop machine through the IPCop admin web pages (necessary for file transfer)

IPCop Web GUI -> SYSTEM -> SSH ACCESS

- Enable Squid on your IPCop machine through the admin web pages (needed for Privoxy to work)

IPCOP Web GUI -> SERVICES -> Proxy

- You will need a secure copy (scp) client to copy the package to your IPCop firewall and a secure shell client (ssh) to actually install the package if working on Unix, you should have ssh and scp already installed, if not you have to install these programs from the linux distribution you are using, or compile them yourself

If working on windows you could use (both Open Source and free):

Graphical secure copy client:

WinSCP

Putty

http://winscp.sourceforge.net/eng/

Graphical secure shell client:

http://www.chiark.greenend.org.uk/~sgtatham/putty

Putty includes a command line secure copy client called pscp.exe

- Download the latest Copfilter version from http://www.copfilter.org. Do not try to extract this tar file on windows (your Virus scanner will warn you about 4 Test Virus files in the archive), instead copy it to the IPCop machine by doing the following:

Copy the package to the firewall

Copy the package to the IPCop firewall using a secure copy client (scp) on a Unix or Linux machine (type the following command in one line!):

scp -P 222 <Copfilterpackage_name> root@<your_IPCop's_machine_ipaddress>:/root

(Notice that port 222 needs to be used!)

OR on a windows machine using WinSCP

Start WinSCP and create a new session in the WinSCP login screen, then drag and drop the Copfilter installation file to the IPCop /root and click on copy when asked to confirm

OR on a windows using Putty's pscp

pscp -P 222 <package_name> root@<your_IPCop's_machine_ipaddress>:/root



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aroot@192.168.112.254	- WinSCP			
Local <u>M</u> ark <u>F</u> iles <u>C</u> omma	ands <u>S</u> ession <u>O</u> ptions <u>R</u> emote	<u>H</u> elp		
] 🗢 🕅 🗊 • 🏦 🖬	诸 📀 🎟 😤] 🕀 🖂	🛛 🔹 🖉 🛛 🎽 🔽	@192.168.112 💌 🀜 📑 👻	F
] 🖘 D ▼ 🖕 ▪ ⇒ →	🛛 🖻 🕅 🚮 😰 🔓	root 💌		🔏 😰 🔤 🏣
D:\copfilter\copfilter		/root	· · ·	
Name	Size Type	Name 🛆	Size Changed	Rights Owr
b .	Parent directory	💼	16.04.2005 18:	rwxr-xr-x root
copfilter-0.1.0beta1.tgz	10.476.984 PowerArchiver			
	9% Lopying		×	
			Cancel	
			<u>M</u> inimize	
	File: D:\copfilter\copfilter\	.copfilter-0.1.0beta1.tgz		
	Target: /root/		Speed	
	Transfer mode: Binary	Resume: Enabled	5% 100%	
	Time estimated: 0:00:41	Time elapsed: 0:00:04		
	Bytes transfered: 988 KB	CPS: 246 KB/s		
	Disconnect when operation	finishes		
•	<u> </u>			Þ
0 B of 10.231 KB in 0 of 1		0 B of 0 B in 0 of 0		
🕫 F2 Rename 👘 🌌 F4 Edit	ı 🛱 F5 Copy 🛛 📲 F6 Move	💣 F7 Create Directory	🗙 F8 Delete 👘 🎬 F9 Propertie	es 👖 F10 Quit
8.467 B 1.09	16 KB 🕺 🗊 🔒 aes	SFTP (v3)	0:00:16	

Fig. 1: copy the package to the firewall using WinSCP (assuming 192.168.112.254 is your IPCop's IP address)

Install the package on the firewall

1. Login to the IPCop machine with a SSH client

Example with Putty:

Start putty

- Enter the IP-Address of your IPCop machine into the "Host Name (or IP address)" field
- Enter the ssh port of your IPCop machine into the "Port" field, this is usually: "222"
- Enter a session name in "Saved Sessions", for example "IPCop"
- Click on "Save"
- Click on "Open" to start the ssh session to your IPCop machine

You should now have an open terminal session with Putty

2. If you are updating, first uninstall the old version



Note:

Everything which was Copfilter related will be deleted without confirmation, you might want to create backup before uninstalling:

/var/log/Copfilter/default/setup_util -b

to uninstall:

/var/log/Copfilter/default/setup_util -u

3. Extract the package

cd /root tar xzvf Copfilter-0.1.0.tgz

(version number could be different than in this example)

4. Change to the directory and install the new package

cd Copfilter-0.1.0 ./install

This script will automatically extract the setup tar file and will also automatically execute /var/log/Copfilter/default/setup_util -i If it fails and you get these error messages:

gzip: stdin: unexpected end of file Copfilter-0.1.0beta2/install tar: Unexpected EOF in archive tar: Unexpected EOF in archive tar: Error is not recoverable: exiting now

Then this means that you have not correctly downloaded the full file, try to redownload the file and then try again

💤 192.168.112.253 - PuTTY .tgz ▲| -rwxr--r-- 1 root root 1145 2005-08-24 21:37 install root@ipcop:~/copfilter-0.1.0beta10a # ./install md5check done extracting ... done now executing /var/log/copfilter/0.1.0beta10a/setup_util -i Copfilter installation -- Version 0.1.0beta10a WARNING: This package is NOT an official ipcop addon. It has not been approved or reviewed by the ipcop development team. It comes with NO warranty or guarantee, so use it at your own risk. This package adds firewall rules, proxies, filters, virus scanners and precompiled binaries to your ipcop machine, which is a big security risk ! There are probably several ways of breaking or intruding copfilter (pls do report if you find any), so if security is an issue, do NOT install this package. Continue ? [y/N]

Fig. 2: Running the Installation Script in a Putty Session



₽ 192.168.112.253 - PuTTY	
	<u> </u>
Continue ? [y/N]y	
Ok, now installing copfilter on your machine	
extracting tar file for /usr/local/bin helper scripts	ok
adding startup scripts to /etc/rc.d/rc.local	ok
adding copfilter startup scripts to /etc/rc.d/rc.firewall.local	ok
adding copfilter users and groups	ok
changing ownerships	ok
linking init scripts to /etc/rc.d/init.d/	ok
modifying crontab	ok
linking unzip to /usr/local/bin	ok
linking wget to /usr/local/bin	ok
installing copfilter webgui for ipcop >= 1.4.4	ok
installing copfilter webgui for email white/black lists	ok
inserting webgui entry into header.pl	ok
adding copfilter documentation to /home/httpd/html/copfilterdoc	ok
Modifying /etc/httpd/conf/httpd.conf and restarting httpd	ok
deleting link to copfilter installation directory from /root	ok
creating default link	ok
creating a new razor account (this could take a minute)	ok
Copfilter 0.1.0beta10a installation completed successfully ?	
Don't forget to:	
1. Foter your Email Address and Smtn Server in the Confilter weboui	
IPCon webnui -> Services -> Confilter	
2. Bead the documentation: BFADMF	
(in webaui or /root/confilter/doc)	
3. Configure Confilter webgui: configure AND press >>Save Settings<< in	each
section and then neess >>Restart All Services to start all programs	
4. If desired run tests from the webaui or from	
/root/confilter/tests/make all tests.sh	
Pls report errors and questions to	
>>copfilter-main at lists dot sourceforge dot net<<	
>>hello at test dot com<< is an email address and would mean hello@test.	com
or visit the official copfilter forum (link is at the <u>bottom of the webo</u>	ui)
root@ipcop:~/copfilter-0.1.0beta10a #	

Fig. 3: Screen Output of the Installation Script after a successful Installation

If you are a Home User, you could also install the F-Prot Virus Scanner (free for Home Use) so that your email will be scanned by 2 different Virus Scanners which increases security. This package only includes ClamAV Virus Scanner and you can optionally install F-Prot with the included installation script:

Home Users please read

http://www.f-prot.com/products/home_use/linux

Corporate Users please read

http://www.f-prot.com/products/corporate_users/unix/index.html

Only proceed to the next step if you fulfill the requirements as a Home User!

Download (from above URL) and copy the downloaded file (for example fp-linux-ws-4.3.3.tar.gz) to the IPCop machine into the /root/Copfilter directory, change to the Copfilter directory

cd /root/Copfilter



and execute

./setup_util -f fp-linux-ws-4.3.3.tar.gz

After installing F-Prot, additional options will appear in the Web GUI -> Anti-Virus section from where it can be activated to scan emails

Quick configuration

(for details please see the next section)

Open your web browser and go to your IPCop web configuration interface a new menu will appear under Services/Copfilter with which you can now configure Copfilter

Most important:

go to Copfilter -> Email and configure your email address and your SMTP server and click on save settings

The Email Address field is often misunderstood, this field is not a list of email addresses which will be scanned for Viruses, in fact all emails, no matter what email address is used will be scanned transparently, there is no list of email addresses to be scanned, since all emails will be recognized automatically.

The email address in this field will only be used as a recipient for Virus notification updates and a few other notifications

You can now test, if emails sent you are being scanned, by clicking on the buttons (available in the Copfilter -> Test&Debug Web GUI):

- 1. "Send Test Virus Email"
- 2. "Send Test Spam Email"
- 3. "Send Test Email+bad Attachment"

You should then receive:

- 1. a Virus notification message
- 2. a email with the subject tagged as *** Spam ***
- 3. an email with an ***renamed*** exe attachment called "**test_attachment.exe.bad**" you can still rename the attachment to what it original was, but the purpose of this procedure is to prevent users "blind-clicking" on any exe attachment. If the exe attachment is renamed to .bad nothing will happen.

Please also visit the 2 websites (links are in the Web GUI)

For more information on the "Test&Debug" Web GUI please refer to Chapter "Testing" on page 44 of this manual.



File Edit Yiew Go Bookmarks Tools Help Image: Imag	
Image:	
Test & Debug: Test & Debug: These buttons send you an email to Email address, which contain either a Virus, Spam or a bad attachment. This will help you to test the Copfilter POP3 & SMTP Scanning. These outgoing emails will not be scanned while being sent from this machine. They will be scanned while being sent from this machine. They will be scanned while downloading them with your pop3 email client (if POP3 Scanning is enabled) or while arriving at your local smtp server (if incoming SMTP Scanning is enabled). Send Test Spam Email Outgoing SMTP Scanning is enabled). Send Test Spam Email	
Test & Debug: These buttons send you an email to Email address, which contain either a Virus, Spam or a bad attachment. This will help you to test the Copfilter POP3 & SMTP Scanning. These outgoing emails will not be scanned while being sent from this machine. Send Test Virus Email They will be scanned while downloading them with your pop3 email client (if POP3 Scanning is enabled) or while arriving at your local smtp server (if incoming SMTP Scanning is enabled). Send Test Spam Email Outgoing SMTP Scanning can only be tested with your own email	
Test POP3 & SMTP Scanning These buttons send you an email to Email address, which contain either a Virus, Spam or a bad attachment. This will help you to test the Copfilter POP3 & SMTP Scanning. These outgoing emails will not be scanned while being sent from this machine. They will be scanned while downloading them with your pop3 email client (if POP3 Scanning is enabled) or while arriving at your local smtp server (if incoming SMTP Scanning is enabled). Outgoing SMTP Scanning can only be tested with your own email	
Test Por Standing These buttons send you an email to Email address, which contain either a Virus, Spam or a bad attachment. This will help you to test the Copfilter POP3 & SMTP Scanning. These outgoing emails will not be scanned while being sent from this machine. They will be scanned while downloading them with your pop3 email client (if POP3 Scanning is enabled) or while arriving at your local smtp server (if incoming SMTP Scanning is enabled). Outgoing SMTP Scanning can only be tested with your own email	
contain either a Virus, Spam or a bad attachment. This will help you to test the Copfilter POP3 & SMTP Scanning. These outgoing emails will not be scanned while being sent from this machine. Send Test Virus Email They will be scanned while downloading them with your pop3 email client (if POP3 Scanning is enabled) or while arriving at your local smtp server (if incoming SMTP Scanning is enabled). Send Test Virus Email Outgoing SMTP Scanning can only be tested with your own email Send Test Spam Email	
They will be scanned while downloading them with your pop3 email client (if POP3 Scanning is enabled) or while arriving at your local smtp server (if incoming SMTP Scanning is enabled). Outgoing SMTP Scanning can only be tested with your own email Send Test Spam Email	
Outgoing SMTP Scanning can only be tested with your own email Send Test Emailshad Attachment	
client when sending outgoing email (if outgoing SMTP Scanning is enabled). You could also use the <u>Anti-Virus Testing Tool</u> . (not all are recognized, which is ok)	
Scanning confirmation You can turn on 'Add Copfilter Comment to Header' to check if any email was really scanned by copfilter. This is an example of what gets inserted into the header of every the scanned email, for you to check if the email has been scanned:	
X-Filtered-With-Copfilter: Version 0.1.0betal0 (P3Scan 2.1.99-Oldev) X-Copfilter-Spam-Scanned: SpamAssassin 3.0.4 X-Copfilter-Virus-Scanned: ClamAV 0.86.2/1034 - Thu Aug 18 22:07:58 2005 X-Copfilter-Virus-Scanned: F-PROT 4.5.4 Engine version: 3.16.6 X-Copfilter-Virus-Scanned: SIGN.DEF 18 Aug05 - SIGN2.DEF 19 Aug05 - MACR0.DEF 15 Aug05	
Test HTTP & FTP Scanning Copfilter log files	
Download a Testvirus via HTTP clamd.log php error.log Download a Testvirus via FTP frox.log privoxy jarfile havp_access.log privoxy lagfile posstrillog prossmtpd.log p3scan.log rendt.log spamd.log spamd.log	
Latest stable version is: Copfilter Copfilter Forum Copfilter Mailing List 0.0,95.1 by Markus Madlener @ by Jens Heinemann @ <u>subscribe here</u> Latest beta version is: http://www.copfilter.org http://copfilter.endlich-mail.de browse the Archives	
	-
Done 192.168.112.254:445	-

Fig. 4: The Test & Debug Web GUI



Readme for Copfilter 0.1.0 beta and Copfilter 0.80 stable



Download a Test Virus via HTTP

(http://www.eicar.org/anti_virus_test_file.htm)

Download a Test Virus via FTP
(http://www.trendmicro.com/en/security/test/overview.htm)

and check if access to those files is denied - if above tests where successful you can now safely use email/HTTP/FTP



Configuration

To access the Copfilter Web-GUI start your browser and enter the IP address (of the green IPCop interface) or Hostname of your IPCop server along with a port director of either 445 (https/secure) or 81(redirected to 445):

https://IPCop:445

or

or

https://192.168.112.254:445 or

http://IPCop:81

http://192.168.112.254:81



Fig. 5: The Copfilter Web GUI

Note:

If the Web GUI has vanished (for example when updating IPCop) execute the following command to readd the menu:

/var/log/copfilter/default/setup_util -a



Status

Options:

No options can be configured.

This window will give you access to the Copfilter documentation. The currently installed Copfilter version is displayed as well as this warning message:

WARNING: This package is NOT an official IPCop add-on. It has not been approved or reviewed by the IPCop development team. It comes with NO warranty or guarantee, so use it at your own risk. This package adds firewall rules, proxies, filters and Virus scanners to your IPCop machine. Do NOT use Copfilter if security is an issue. With HAVP you could still receive a Virus.

Next follows a section with information regarding the status of each of the currently installed programs, including:

- product name
- short description
- associated daemon
- version number
- daemon status, if any daemons are running their PID numbers are shown
- ability to manually stop or start the daemon

😻 IPC	op - Copfilter - Mo	ozilla Firefox					<u> </u>
Eile	<u>E</u> dit <u>V</u> iew <u>G</u> o	<u>B</u> ookmarks <u>T</u> ools <u>H</u> elp					- O 🔾
$\langle $	• 🖒 • 🛃	🙁 😭 🕒 https://192	2.168.112.254:44	15/cgi-bin/copfilte	r.cgi	<mark>6 -</mark> O 60 💽	
	-						_
	Status:						
	Product	Description	Daemon	Version	Status	Manual Control	
	monit	Monitoring Utility	monit	4.5.1	ON (PID 13816 870 869)	Restart monit	
	<u>P3Scan</u>	Transp. POP3 Proxy	p3scan	2.1.99-03dev	ON (PID 13840)	Restart p3scan	
	<u>ProxSMTP</u>	Transp. SMTP Proxy	proxsmtpd	1.2.1	ON (PID 5058 775)	Restart proxsmtpd	
	HAVP	Transp. HTTP Proxy	havp	0.68	ON (PID 22378 22377)	Restart havp	
	<u>Privoxy</u>	Transp. HTTP Proxy	privoxy	3.0.3	ON (PID 874 717)	Restart privoxy	
	frox	Transp. FTP Proxy	frox	0.7.18	ON (PID 689)	Restart frox	
	SpamAssassin	1 AntiSpam Filter	spamd	3.0.4	ON (PID 6463 6462 6455)	Restart spamd	
	<u>ClamAV</u>	AntiVirus Program	clamd	0.86.2/1062	ON (PID 872 557)	Restart clamd	
	F-PROT**	AntiVirus Program	no daemon	4.6.0	ON ACCESS (no pid)		
	<u>Renattach</u>	Attachment Renamer	no daemon	1.2.2	ON ACCESS (no pid)	Postart all convisoo	
	Rules Du Jour	AntiSpam Rulesets	no daemon	1.21	ON ACCESS (no pid)	in order to apply all	
	<u>P3PMail</u>	Email Sanitizer	no daemon	1.3	OFF	saved settings	
	** <u>Corporate</u> If a service is stay off Trans. = Tran	<u>Users</u> of F-PROT have to a restarted, and your settin sparent (no client reconfig	obtain a <u>comm</u> gs indicate tha uration necess	ercial license ! t this service (ary)	vill not be used, then the service will		_
Done						192.168.112.254	:445 🛅 🏒
,							

Fig. 6: The Copfilter Web GUI showing the status of the installed Services



Three additional buttons are available for accessing:

- Virus Quarantine
- Spam Quarantine
- Monit Service Manager
- Copfilter Whitelist Manager
- Copfilter Spam Digest Manager

Notes:

If a service is stopped or started manually, then monitoring for that service will stop, to re-enable monitoring of all enabled services, restart the monit service

F-PROT is a commercial program. It is free for Home Users only. Corporate Users have to obtain a license!

If a service is restarted, and your settings indicate that this service will not be used, then the service will stay off.

The abbreviation Trans. stands for Transparent and it means that no client reconfiguration necessary to use this service.

Email Settings

- 🗇 - 🥰 🔕 🏠 🕒 https://192.168.112.254:445/cgi-b	oin/copfilter.cgi	<u>e</u> o o <u>C</u>	
Email:			
Email address: email@address.com SMTP server: smtp.server.com Sender address: email@address.com	SMTP-AUTH enabled: SMTP-AUTH user: ● SMTP-AUTH password: ●	off 💌	
No service restart required Save settings	This field may be blank.		
		192.168.112	2.254:44

Fig. 7: Configure your email settings in the Copfilter Web GUI

Options:

Enter your email address, the SMTP server, the sender address and configure SMTP-auth if your SMTP server requires it.

- Email Address: Enter your email address here, you will then receive various notifications regarding the result of Copfilter service procedures.
- SMTP server: This is the address of your Internet Provider's SMTP server. You can also use your own SMTP server if it is located on your internal network.



Sender Address:

This is the email address which will be used to send emails from. It will appear as the sender email address when you receive emails from Copfilter. If you don't know what to enter, leave it blank and Copfilter will automatically use your Email Address as your sender address.

If your SMTP server supports SMTP-AUTH you can enable it here (switch it to "on"), and enter the appropriate username and password.

The following notification will be sent to the Email Address mentioned above:

- Virus signature updates
- Antispam ruleset updates
- Imap BAYES Training results
- Failed services and if the automatic restart has been successful
- Copy of Virus notification messages if this has been activated

Notes:

No service restart is required.

Monitoring



Fig.	8:	Mon	it	Service
Mana	ger	Setti	ngs	within
the	Copfi	ilter	Web	GUI

Options:

Monitor all enabled services

This will enable monitoring for all enabled services which are being used



Note:

- 1. Monit will only monitor services that currently are running, as configured per Web GUI.
- 2. If any monitored service fails, then Monit will within 60seconds automatically restart that service and send a notification to Email address
- 3. If any monitored service is stopped manually on the IPCop command line then monitoring for that service will stop, restarting the service manually will NOT enable monitoring again
- 4. To re-enable monitoring of all enabled services, restart the Monit service
- 5. The Monit Service Manager has a list of all currently monitored services
- 6. Authorization for Monit Service Manager: user "admin" and same password as in IP-Cop Web GUI
- ** Restart of Monit service required

Notes:

Clicking on the "Save settings" button will automatically restart the necessary services in order to apply your settings. Enable "Skip Service Restart" if you wish to skip restarting the service.

The following link to another Web GUI is available to retrieve information and to manage the monitored services:

Monit Service Manager:

https://192.168.112.254:446/

(assuming, 192.168.112.254 is your IPCop's IP address)

Fig. 9: The Monit Service Manager showing the Status of all monitored services

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<u>+ome</u> >						monit 4.5.1
		P.	1onit Service M	lanager		
	Monit is	running on va	anilla.madlener.no-ip.org \	with <i>uptime, 9m</i> and	d monitoring:	
				•	-	
	System		Load	CPU	Memory	
	∨anilla.madlene	r.no-ip.org	[0.00][0.14][0.24]	0.0%us, 0.0%sy	55.6% [143008 kB]	
	Process	Status	Uptime	CPU	Memory	
	<u>httpd</u>	running	7h 18m	0.0%	0.8% [2292 kB]	
	<u>clamd</u>	running	3h 25m	0.0%	3.4% [8752 kB]	
	<u>havp</u>	running	9m	0.0%	3.6% [9368 kB]	
	<u>p3scan</u>	running	12m	0.0%	0.4% [1032 kB]	
	<u>privoxy</u>	running	3h 25m	0.0%	0.4% [1224 kB]	
	proxsmtpd	running	2h 17m	0.0%	0.3% [792 kB]	
	<u>spamd</u>	running	3h 27m	0.0%	16.1% [41496 kB]	
						_



POP3 Scanning

POP3 Scanning (P3Scan): Enable P3Scan to analyze outgoing In I traffic on GREEN** In I Tag Span in emails and mon I In I Tag Span in emails and mon I In I Add Copfilter Comment to Email Header In I In I Send a copy of virus containing HTML * In I Add Copfilter Comment to Email Header In I Send a copy of virus containing HTML * In I Quarantine span emails if *** In I On I Infected emails *** infected emails *** in if score is greater than: II I In I Infected emails in quarantine if older than (in days) In I Note: If an explosion to Use POP3S (pop3-ssl) then configure your email client to fetch email via pop3 on port you wish to use POP3S (pop3-ssl) then configure your email client to fetch email via pop3 on port you wish to use POP3S (pop3-ssl) then configure your email client to fetch email via pop3 on port you wish to use POP3S (pop3-ssl) then configure your email client to fetch email via pop3 on port you wish to use POP3S (pop3-ssl) then configure your email client to fetch email via pop3 on port you wish to use POP3S (pop3-ssl) then configure your email client to fetch email via pop3 on port you wish to use POP3S (pop3-ssl) then configure your email client to fetch email via pop3 on port you wish to use POP3 Protocol does not allow email discarding during POP3 retrieval to so rotification: The POP3 Protocol does not allow email discarding during POP3 retrieval con rotification: cannot be disabed)		Oceanian Octions		web and
Enable P3Scan to analyze outgoing Im I Stop virus emails and send virus instead Im I Tag Spam in emails and modify the subtext Im I Tag Spam in emails and modify the subtext Im I Tag Spam in emails and modify the subtext Im I Im I Im I Remarme bad attachments in emails which are dangerous Im I Im I Sanitize and clean emails Off I Add Copfilter Comment Im I Send a copy of virus Im I to Email Header Im I Send a copy of virus Im I Quarantine spam emails if *** Im I Send a copy of virus Im I use Copfilter Whitelist ++ Im I Im I Im I Im I use Copfilter Whitelist ++ Im I Im I Im I Im I If score is greater than: I2 Remove emails in quarantine Im I If soore is greater than: I2 Remove emails in quarantine Im I If soore is greater than: I2 Remove emails in quarantine Im I If soore is greater than: I2 Remove emails in quarantine Im I If soore is greater than: I2 Remove emails in quarantin	POP3 Scanning (P3Scan):			
Enable P3Scan to analyze outgoing on • traffic on GREEN** on • Tag Spam in emails and modify the subject on • Tag Spam in emails and modify the subject on • Rename bad attachments in emails which are dangerous on • Sanitize and clean emails off • Add Copfilter Comment to Email Header on • On • • Quarantine spam emails if *** on • Quarantine virus if score is greater than: 12 • Note: Remove emails in quarantine if older than (in days) 7 Maw with to use POP35 (pop3-ssl) then configure your email client to fetch email via pop3 on port 995 (WITHOUT SSL 1) P3Scan will then automatically open a pop3s (pop3 ssl secured) connection to your email server • UNSTABLE, Sanitize function (P3PMail) will remove dangerous HTML tags (like pictures) from email messages. If an email contains a non-RFC compliant MIME attachment, P3PMail will damage it (CRC Errors). It is safer to turn this option OFF. •** Usersceive a a nuffication. The POP3 Protocol d				
Tag Spam in emails and modify builded to be attachments in emails which are dangerous on * Add Copfilter Comment on * Sanitize and clean emails off * Sanitize and clean emails off * Sanitize and clean emails off * Add Copfilter Comment on * Sanitize and clean emails off * Containing HTML * off * Mathematical transformed to Email address on * Use Copfilter Whitelist ++ on * Use Copfilter Whitelist ++ on * if score is greater than: 12 * Pay wish to use POP3S (pop3-ss) then configure your email client to fetch emails in quarantine for our email server 7 * UNSTABLE, Sanitize function (P3PMail) will remove dangerous HTML tags (like pictures) from email messages. If an email contains a non-RFC compliant MIME attachment, P3PMail will damage it (CRC Errors). It is safer to turn this option OFF. ** UNSTABLE, Sanitize function (P3PMail) will remove dangerous HTML tags (like pictures) from email messages. If a sender to turn this option OFF. ** Restart of p3scan service required *** Users receive a nutritiontion. *** Users receive a nutrition the PDP3 Protocol does not allow email discarding during POP3 retrieval (so notifications cannot be disabled) *+ 1 f sender address is in whitelist, spam sp	Enable P3Scan to analyze outgoing traffic on GREEN**	on 💌	Stop virus emails and send virus <u>notifications</u> instead	on 💌
Rename bad attachments in emails which are dangerous in the second containing HTML * Immediate in the second containing HTML * Add Copfilter Comment to Email Address Immediate in the second containing HTML * Immediate in the second containing HTML * Add Copfilter Comment to Email Header Immediate in the second containing HTML * Immediate in the second containing HTML * Add Copfilter Comment to Email Header Immediate in the second containing HTML * Immediate in the second containing HTML * Quarantine spam emails if *** Immediate in the second containing HTML * Immediate in the second containing HTML * Immediate in the second containing HTML * Quarantine spam emails if *** Immediate in the second containing HTML * Quarantine spam emails if *** Immediate in the second containing HTML * Quarantine spam emails if *** Immediate in the second containing HTML * Mote: If you wish to use POP3S (pop3-sel) then configure your email client to fetch email via pop3 on port your email second contains a no			Tag Spam in emails and modify the subject	on 💌
Sanitize and clean emails containing HTML * off • Add Copfilter Comment to Email Header on • Send a copy of virus notification to Email address on • Quarantine spam emails if **** on • • Use Copfilter Whitelist ++ on • Quarantine spam emails if **** on • • Quarantine virus infected emails *** on • if score is greater than: 12 • Remove emails in quarantine f older than (in days) 7 Note: If you wish to use POP3S (pop3-ssl) then configure your email client to fetch email via pop3 on port 995 (WITHOUT SSL 1) P3Scan will then automatically open a pop3s (pop3 ssl secured) connection to your email server * * UNSTABLE, Sanitze function (P3PMail) will remove dangerous HTML tags (like pictures) from email messages. If an email contains a non-RPC compliant MIME attachment, P3PMail will damage it (CRC Errors). It is safer to turn this option OFF. ** Lestar to f p3scan service required *** Users receive a notification. The POP3 Protocol does not allow email discarding during POP3 retrieval (so nothications cannot be disabled) ++ If senter address is in whitelist, spam spam scanning will be skipped.			<u>Rename</u> bad attachments in emails which are <u>dangerous</u>	on 💌
Add Copfilter Comment to Email Header Image: Notification to Email address notification to Email address Image: Notification to Email address Use Copfilter Whitelist ++ Image: Notification to Email address Image: Notification to Email address Quarantine spam emails if *** Image: Notification to Email address Image: Notification to Email address Quarantine spam emails if *** Image: Notification to Email			Sanitize and clean emails containing HTML *	off 💌
Quarantine spam emails if **** on • Quarantine spam emails if **** on • Quarantine spam emails if **** on • if score is greater than: 12 • 12 • Remove emails in quarantine for dear the state of the stat	Add Copfilter <u>Comment</u> to Email Header	on 💌	Send a copy of virus <u>notification</u> to <u>Email address</u>	on 💌
Quarantine spam emails if **** on if and infected emails **** on if infected emails **** if score is greater than: 12 if and infected emails in quarantine if older than (in days) 7 Note: If you wish to use POP3S (pop3-ssl) then configure your email client to fetch email via pop3 on port 995 (WITHOUT SSL !) P3Scan will then automatically open a pop3s (pop3 ssl secured) connection to your email server 7 * UNSTABLE, Sanitize function (P3PMail) will remove dangerous HTML tags (like pictures) from email messages. If an email contains a non-RFC compliant MIME attachment, P3PMail will damage it (CRC Errors). 8 It is safer to turn this option OFF. *** Restart of p3scan service required **** Users receive a notification. The POP3 Protocol does not allow email discarding during POP3 retrieval (so notifications cannot be disabled) ++ If sender address is in whitelist, spam spam scanning will be skipped. Save settings Save settings Save settings			Use Copfilter <u>Whitelist</u> ++	on 💌
Quarantine spam emails if **** On Y infected emails **** On Y if score is greater than: 12 Y Remove emails in quarantine if older than (in days) 7 Note: If you wish to use POP3S (pop3-ssl) then configure your email client to fetch email via pop3 on port 995 (WITHOUT SSL !) P3Scan will then automatically open a pop3s (pop3 ssl secured) connection to your email server 7 * UNSTABLE, Sanitize function (P3PMail) will remove dangerous HTML tags (like pictures) from email messages. If an email contains a non-RFC compliant MIME attachment, P3PMail will damage it (CRC Errors). It is safer to turn this option OFF. ** Restart of p3scan service required *** Users receive a notification. The POP3 Protocol does not allow email discarding during POP3 retrieval (so notifications cannot be disabled) ++ If sender address is in whitelist, spam spam scanning will be skipped. Save settings			Quarantine virus	
if score is greater than: 12 Remove emails in quarantine if older than (in days) 7 Note: If you wish to use POP3S (pop3-ssl) then configure your email client to fetch email via pop3 on port 995 (WITHOUT SSL!) P3Scan will then automatically open a pop3s (pop3 ssl secured) connection to your email server 7 * UNSTABLE, Sanitize function (P3PMail) will remove dangerous HTML tags (like pictures) from email messages. If an email contains a non-RFC compliant MIME attachment, P3PMail will damage it (CRC Errors). It is safer to turn this option OFF. ** Restart of p3scan service required *** Users receive a <u>notification</u> . The POP3 Protocol does not allow email discarding during POP3 retrieval (so notifications cannot be disabled) ++ If sender address is in whitelist, spam spam scanning will be skipped. Save settings Save settings	Quarantine spam emails if ***	on 💌	infected emails ***	on 💌
Note: If you wish to use POP3S (pop3-ssl) then configure your email client to fetch email via pop3 on port 995 (WITHOUT SSL !) P3Scan will then automatically open a pop3s (pop3 ssl secured) connection to your email server * UNSTABLE, Sanitize function (P3PMail) will remove dangerous HTML tags (like pictures) from email messages. If an email contains a non-RFC compliant MIME attachment, P3PMail will damage it (CRC Errors). It is safer to turn this option OFF. ** Restart of p3scan service required **** Users receive a <u>notification</u> . The POP3 Protocol does not allow email discarding during POP3 retrieval (so notifications cannot be disabled) ++ If sender address is in whitelist, spam spam scanning will be skipped. Save settings	if score is greater than:	12 💌	Remove emails in quarantine if older than (in days)	7
 * UNSTABLE, Sanitize function (P3PMail) will remove dangerous HTML tags (like pictures) from email messages. If an email contains a non-RFC compliant MIME attachment, P3PMail will damage it (CRC Errors). It is safer to turn this option OFF. ** Restart of p3scan service required *** Users receive a <u>notification</u>. The POP3 Protocol does not allow email discarding during POP3 retrieval (so notifications cannot be disabled) ++ If sender address is in whitelist, spam spam scanning will be skipped. Save settings 	<u>Note:</u> If you wish to use POP3S (pop3-ssl) 995 (WITHOUT SSL !) P3Scan will th your email server	then configure your email clie en automatically open a pop3s	nt to fetch email via pop3 on port (pop3 ssl secured) connection to	
(so notifications cannot be disabled) ++ If sender address is in whitelist, spam spam scanning will be skipped. Save settings	 * UNSTABLE, Sanitize function (P3P) If an email contains a non-RFC com It is safer to turn this option OFF. ** Restart of p3scan service require *** Users receive a notification. The 	Mail) will remove dangerous HT pliant MIME attachment, P3PMa d POP3 Protocol does not allow	ML tags (like pictures) from email r il will damage it (CRC Errors). email discarding during POP3 retrie	nessages. .val
Save settings	(so notifications cannot be disabled) ++ If sender address is in whitelist,	spam spam scanning will be sl	kipped.	
	Save settings			

Options:

Enable P3Scan to filter outgoing traffic on **GREEN**** Enable P3Scan to filter outgoing traffic on **BLUE**** Enable P3Scan to filter outgoing traffic on **ORANGE****

If a client in the GREEN, BLUE or ORANGE network initiates a POP3 session, which means that he tries to retrieve email from his POP3 server, then this POP3 traffic will be filtered according to the above settings. **BLUE** and **ORANGE** interface options will only appear if these interfaces exist.

If you wish to use POP3S (pop3-ssl) then leave the current settings of your email client just the way they are and only change the PORT number of your POP3 email server from 110 to 995 (DO NOT ACTIVATE SSL!) P3Scan will then automatically open an encrypted pop3s (pop3 ssl secured) connection from your IPCop machine to your POP3 email server and forward the emails to you.



Stop Virus emails and send Virus notifications instead

With these options you can enable or disable Virus scanning of incoming POP3 email. This will only work if either ClamAV or F-Prot (if installed) are enabled.

If a Virus is found in an email, the user will receive a Virus notification message with

- information about the detected Virus
- email delivery information (original sender, subject, recipients, date,..)
- the complete unmodified header
- if Virus quarantining has been enabled, the filename containing the original message will be shown

Depending on the quarantine settings the administrator would then be able to access the original file.

Tag Spam in emails and modify the subject

With these options you can enable or disable Spam scanning. If an email gets detected as Spam its subject field will be tagged with *** Spam ***. The user will still receive this email, with no further modifications of the original email. With this procedure any email client will be able to use its own message rules to automatically delete or move these Spam messages.

Rename dangerous email attachments

With these options you can enable or disable attachment renaming Emails with bad attachment will be tagged in the subject field with *** renamed attachment ***. The attachment will be renamed to "originalattachmentname_originalextension.bad". This list of bad attachments can be viewed in the Web GUI -> Copfilter AntiSpam for more information

Sanitize and clean emails containing HTML

This option will modify an email so that it is safe for viewing, the modification depend on the used sanitizer. P3PMail for example removes all dangerous html tags.

Add Copfilter Comment to Header

If this option is enable Copfilter will add email headers of every email, an example:

X-Filtered-With: Copfilter Version 0.1.0betal (P3Scan 2.1.99-00dev)
X-Spam-Scanned: SpamAssassin 3.0.2
X-Virus-Scanned: ClamAV 0.83/833 - Sat Apr 16 04:31:36 2005
X-Virus-Scanned: F-PROT 4.5.4 Engine version: 3.16.6
X-Virus-Scanned: SIGN.DEF 15 Apr05 - SIGN2.DEF 16 Apr05 - MACRO.DEF 15 Apr05

The X-AntiVirus line will only appear if Virus scanning was enabled. The X-AntiSpam line will only appear if Spam scanning was enabled. The following lines will appear in the header if appropiate X-Copfilter:Sender is in whitelist, skipped SpamAssassin X-Copfilter:Client is part of our network, skipped SpamAssassin

Send a copy of Virus notification to Email address

This allows an administrator to get a copy of every Virus notification message.

Use Copfilter Whitelist

If sender address is in Copfilter Whitelist, Spam scanning will be skipped.



This Email Header will be inserted:

X-Copfilter:Sender is in whitelist, skipped SpamAssassin

This does not affect Virus scanning, meaning that all emails whitelisted email address will still be scanned for Viruses.

Quarantine Spam emails if ...

... if score is greater than: 5-40

Emails containing a Spam score greater than the configured value will be quarantined. Users will receive a notification. The POP3 Protocol does not allow email discarding during POP3 retrieval (so these notifications cannot be disabled)

Quarantine Virus infected emails

This option will save an original copy of a Virus infected email in the quarantine. If it is set to off then all infected emails will be deleted immediately.

Remove emails in quarantine if older than (in days)

Any emails in the POP3 quarantine will be deleted if they are older than this amount of days.

Notes:

Clicking on the "Save settings" button will automatically restart the necessary services in order to apply your settings. Enable "Skip Service Restart" if you wish to skip restarting the service.

Restart of p3scan service is required if one of the following options has been modified (the option "Skip Service Restart" can be checked none of below options have been changed):

Enable P3Scan to filter outgoing traffic on **GREEN**** Enable P3Scan to filter outgoing traffic on **BLUE**** Enable P3Scan to filter outgoing traffic on **ORANGE****



SMTP Scanning

SMTP Scanning (ProxSMTP):			
nable ProxSMTP to analyze		Stop virus emails and	
outgoing traffic on GREEN**		instead (see below)	
		Tag Spam in emails and modify the subject	on 💌
		<u>Rename</u> bad attachments in emails which are <u>dangerous</u>	on 💌
		Sanitize and clean emails containing HTML *	off 💌
Add Copfilter <u>Comment</u> to Email Header	on 💌	Send user a <u>virus notification</u> with information about the originally sent email containing the virus	off 💌
		Send a copy of virus notification to <u>Email address</u>	on 💌
Enable ProxSMTP to analyze		Discard (delete) all	
ncoming traffic on RED and forward to internal Email Server** ***	off 💌	SMTP virus emails (virus quaranting and virus notifications will be disabled)	off 💌
Email Server is located in network	GREEN 🗾	Discard (delete) all SMTP spam emails if	off 💌
Email Server IP Address	1.1.1.1	if score is greater than: (spam quaranting above this score will be disabled)	15 💌
Red IP Alias Address (if this is empty the current RED IP Address will be used)	2.2.2.2	Discard (delete) all SMTP emails with bad attachments	off 💌
Add email addresses from outgoing email to Copfilter**** <u>Whitelist</u>	on 💌	Enable Copfilter <u>Whitelist</u> modifications via <u>email</u> *****	on 💌
Disable all spam scanning on outgoing email from internal network	on 💌	Use Copfilter <u>Whitelist</u> and <u>Blacklist</u> ++	on 💌
Quarantine spam emails if	on 💌	Quarantine virus infected emails	off 💌
if score is greater than:	15 💌		
Send user a copy of quarantined spam email	off 💌	Remove emails in quarantine if older than (in days)	7
* UNSTABLE, Sanitize function (P3PM If an email contains a non-RFC comp It is safer to turn this option OFF. ** Restart of proxsmtpd service requ *** This will open port 25 on you All incoming emails will be reser you allow relaying from your ipoc Please use for example this <u>site</u> Do not enter any port 25 forward **** except when sender=recipient, as all incoming email to this address ***** send email to any external ad copfilter_remove_from_whitelist ++ If sender address is in whitelist, s	lail) will remove dangerous H liant MIME attachment, P3PM ur firewall !! It from your incop firwall op's ip address, you mail to test if your server is a ling rules in IPCop internal email address shoul would then be whitelisted dress (email will be discarde ress@domain.com spam scanning will be skippe	ITML tags (like pictures) from email m Mail will damage it (CRC Errors). I server will become an open relation open relay. Id not be added into the whitelist, Id), with the following text in the body	s that if y !! : (multiple lines possible) nail will be discarded.



Options:

Enable ProxSMTP to filter outgoing traffic on **GREEN*** Enable ProxSMTP to filter outgoing traffic on **BLUE*** Enable ProxSMTP to filter outgoing traffic on **ORANGE***

If a client in **GREEN**, **ORANGE** or **BLUE** initiates a SMTP session, which means that he tries to send an email from his SMTP server, then this SMTP traffic will be scanned. According to the above settings **BLUE** and **ORANGE** interface options will only appear if these interfaces exist.

Stop Virus emails and opt. send Virus notifications instead (see below)

This will only work if either ClamAV or F-Prot (if installed) are enabled as well. With these options you can enable or disable Virus scanning. If a Virus is found in an email, the user will receive a Virus notification message with

- information about the detected Virus
- email delivery information (original sender, subject, recipients, date,..)
- the complete unmodified header
- if email quarantining has been enabled, the filename containing the original message will be shown

Depending on the quarantine settings the administrator would then be able to access the original file.

Tag Spam in emails and modify the subject

With these options you can enable or disable Spam scanning. If an email gets detected as Spam it's subject field will be tagged with *** Spam ***. The user will still receive this email, with no further modifications of the original email. With this procedure any email client will be able to use its own message rules to automatically delete or move these Spam messages.

Rename dangerous email attachments

With these options you can enable or disable attachment renaming. Emails with bad attachment will be tagged in the subject field with *** renamed attachment ***. The attachment will be renamed to "originalattachmentname_originalextension.bad"

This list of bad attachments can be viewed in the Web GUI -> Copfilter AntiSpam for more information

Sanitize and clean emails containing HTML

This option will modify an email so that it is safe for viewing, the modification depend on the used sanitizer. P3PMail for example removes all dangerous html tags.

Add Copfilter Comment to Header

If this option is enabled Copfilter will add email headers of every email, an example:

X-Filtered-With: Copfilter Version 0.1.0betal (P3Scan 2.1.99-00dev)
X-Spam-Scanned: SpamAssassin 3.0.2
X-Virus-Scanned: ClamAV 0.83/833 - Sat Apr 16 04:31:36 2005
X-Virus-Scanned: F-PROT 4.5.4 Engine version: 3.16.6
X-Virus-Scanned: SIGN.DEF 15 Apr05 - SIGN2.DEF 16 Apr05 - MACRO.DEF 15 Apr05

The X-AntiVirus line will only appear if Virus scanning was enabled. The X-AntiSpam line will only appear if Spam scanning was enabled.



The following lines will appear in the header if appropriate

X-Copfilter:Sender is in whitelist, skipped SpamAssassin X-Copfilter: Client is part of our network, skipped SpamAssassin

Send user a Virus notification with information about the originally sent email containing the Virus

This option allows enabling or disabling the client Virus notifications.

Send a copy of Virus notification to Email address

This allows an administrator to get a copy of every Virus notification message.

Enable ProxSMTP to filter incoming traffic on RED and forward to internal Email Server

This option will enable scanning of incoming SMTP traffic. This is useful, if you are running your own SMTP server and you receive email via SMTP to your own mail server. For security reasons it is recommended to put the email server into the DMZ (Orange) network.

Do not enter a port forwarding in IPCop/Firewall/Portforwarding. The necessary rules are being maintained by Copfilter and will not be shown in the IPCop Web GUI. The rules which will be entered, will be shown upon starting proxsmtpd. Be aware that this option opens port 25 on your firewall which will then be transparently redirected to an internal email server.

This means, that your internal email server will be open on port 25 to the internet!

All incoming emails will be resent from your IPCop firwall to your mail server, which means that if you allow relaying from your IPCop's ip address, you mail server will become an open relay !! Please test, if your server is an open relay.

Email Server is located in network

Here you need to define the location of your Email Server

Email Server IP Address

All incoming email will be forwarded to this IP address

Red IP Alias Address (if this is empty the current RED IP Address will be used)

Here you have the option of defining an ip alias address, which would be an additional ip address you got from your provider, solely for email receival.

Red IP Alias Ethernet Interface

Choose, which interface this new IP alias address should have.

Discard (delete) all SMTP Virus emails (virus quarantining and Virus notifications will be disabled)

All incoming SMTP email will be accepted and discarded (deleted) immediately, no Virus quarantining will occur, no Virus notifications will be sent

Discard (delete) all SMTP Spam emails if ...

... if score is greater than: (spam quarantining above this score will be disabled)



Emails containing a Spam score greater than the configured value will be discarded. No Spam quarantining above this score will occur.

Discard (delete) all SMTP emails with dangerous attachments

Emails with dangerous attachments will be accepted and immediately deleted.

Add email addresses from outgoing email to Copfilter Whitelist

This option will extract any Recipient Email Addresses from outgoing SMTP emails which originated from the GREEN, ORANGE and BLUE network. These addresses will then be entered into the Copfilter Whitelist, except when sender=recipient, internal email address should not be added into the whitelist, as all incoming email to this address would then be whitelisted. If you wish to only add email addresses, which originated in the GREEN network then copy this file

/var/log/Copfilter/default/opt/tools/bin/IpInSubnet.pl_add_email_address_to_whitelist
_from_GREEN

to this file

/var/log/Copfilter/default/opt/tools/bin/IpInSubnet.pl

or simply edit /var/log/Copfilter/default/opt/tools/bin/IpInSubnet.pl and modify it for your needs

Disable all Spam scanning on outgoing email from internal network

If an email is sent from a computer located in the internal network (**GREEN** interface) then Spam scanning will be skipped and this Header will be inserted into the email:

X-Copfilter: Client is part of our network, skipped SpamAssassin

Enable Copfilter Whitelist modifications via email

Any user will be able to send an email containing whitelist commands to any external email address. Copfilter will intercept, extract the commands and discard the email.

The body of the email has to contain (multiple lines possible):

Copfilter_add_to_whitelist youraddress@domain.com

Copfilter_remove_from_whitelist adress@domain.com

Users can add email address to the whitelist only, blacklist commands will be ignored, any asterisk in an email address will not be valid, so no *@domain.com whitelist commands will be possible. Only the administrator is able to do this. This is because of security reasons, we don't want any user to blacklist any other users email

Use Copfilter Whitelist and Blacklist

All incoming emails which contain an email address (in the From field) from the Whitelist will not be scanned from Spam. This Email Header will be inserted:

X-Copfilter:Sender is in Whitelist, skipped SpamAssassin

This does not affect Virus scanning, meaning that all emails whitelisted email address will still be scanned for Viruses. All incoming emails which contain an email address (in the From field) from the blacklist will be discarded immediately.



Quarantine Spam emails if ...

... if score is greater than: 5-40

Emails containing a Spam score greater than the configured value will be quarantined. Users will receive a notification. The POP3 Protocol does not allow email discarding during POP3 retrieval (so these notifications cannot be disabled)

Send user a copy of quarantined Spam email

If a Spam email has been quarantined the user will receive a copy.

Quarantine Virus infected emails

This option will save an original copy of a Virus infected email in the quarantine. If it is set to off then all infected emails will be deleted immediately.

Quarantine Virus infected emails

This option will save an original copy of a Virus infected email in the quarantine. If it is set to off then all Virus infected emails will be deleted.

Remove emails in quarantine if older than (in days)

Any emails in the SMTP quarantine will be deleted if they are older than this amount of days.

Notes:

Clicking on the Save settings button will automatically restart the necessary services in order to apply your settings. Enable "Skip Service Restart" if you wish to skip restarting the service. Restart of proxsmtpd service is required if one of the following options has been modified:

- Enable ProxSMTP to filter outgoing traffic on GREEN
- Enable ProxSMTP to filter outgoing traffic on **BLUE**
- Enable ProxSMTP to filter outgoing traffic on ORANGE
- Enable ProxSMTP to filter incoming traffic on **RED** and forward to internal Email Server



HTTP Scanning

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-	🔷 - 😂 🛞 🏠 🕒 https://192.168.112.254:445/cgi-bin/copfilter.cgi 🔤 🖸	Go G
	HTTP Scanning (HAVP,privoxy):	
	Deny access to HTTP traffic containing browser exploits, <u>phishing</u> attempts and viruses, (this starts the HAVP proxy) **	
	Enable Tranparent mode (affects Web Proxy)** on r HAVP only uses ClamAV as a virus scanner (affects Web Proxy)** privoxy reduces web browsing speed (only if C ipcop machine is slow), it could also affect voip privoxy configuration privoxy bookmarklet	:PU on the J/skype quality
	HAVP Virus Log (text) Note 1. If Web Proxy is disabled, it will be enabled automatically, since HTTP Traffic Scanning will only work on Web Prox 2. All web browsers should be set up to use the Web Proxy except when: 3. No browser proxy settings are necessary if Web Proxy is configured in transparent mode 4. Delete the cache of your web browser and Web Proxy before trying to download the eicar testvirus and before accessing privoxy config and bookmarklet 5. Do NOT enter an upstream proxy in ipcop web proxy configuration! 6. If you wish to use an upstream proxy, configure the PARENTPROXY parameter in copfilter/opt/havp/etc/havp.con ** Restart of Privoxy or HAVP Proxy required Save settings	y Traffic. Ifig
Done		192.168.112.254:445 🛅 🎵
	Fig. 12: HTTP Scanning Settings within the Copfilter Web	GUI

Options:

Deny access to HTTP traffic containing browser exploits, phishing attempts and Viruses(this starts the HAVP Proxy)

This option will enable HTTP Virus scanning. If a Virus is found, access to that file will be denied and a webpage notifying you about the name of the Virus will appear instead.

HAVP only uses ClamAV as a Virus scanner. This will also work if ClamAV is disabled since it loads the ClamAV library when starting. For HTTP Scanning, the IPCop Proxy (squid) needs to be enabled. On english IPCop installations the web Proxy gets started automatically.

Enable Transparent mode (affects Web Proxy)

This will option will automatically enable the IPCop Webproxy in transparent mode (only on english installations)

HAVP Virus Log (text)

Some HAVP Virus statistics. If you enable Web Proxy logs, then theses logs will also display the IP address of computer, from which the Virus-infected webpage was requested.



Filter HTTP traffic for Internet Junk (ads, banners, jumping-windows,..)

This option activates the Privoxy internet junk filter. Privoxy only works if HAVP is enabled Privoxy reduces web browsing speed (only, if CPU on the IPCop machine is slow), it could also affect VoIP/Skype quality

Privoxy configuration

This link will allow you to configure Privoxy settings

Privoxy bookmarklet

this link will allow you to quickly enable or disable privoxy, just in case a website isn't displayed correctly with privoxy turned on (you could as well change the Proxy settings) you can also set a bookmark to this link for quick access

Notes:



This has the following advantages:

- All transparent, no web browser client Proxy settings necessary
- Better web browsing performacne since Privoxy filters out junk needed stuff first, before passing along to squid
- Maintains compatibility with other IPCop Add-ons such as COP+, Dansguardian, Advanced Proxy, Urlfilter

Privoxy works between HAVP and SQUID, if enabled. HAVP acts as parent Proxy to squid.

Internet Junk

Ads, Banners, Web-Bugs, unsolicited Pop-Ups, Jumping-Windows, MS Internet Explorer exploits, HTML-annoyances, modifying web page content, and other obnoxious Internet Junk

These settings can be customized here: /var/log/copfilter/default/opt/privoxy/etc/

Added section to Privoxy to easily whitelist domains:

- Enable Privoxy and point your browser to config.privoxy.org
- Then choose "View & change the current configuration"
- Then click on Edit right beside
- "/var/log/copfilter/default/opt/privoxy/etc/user.action"
- Then in the first section (scroll down one page) where you will see the domain ".Copfilter.org"
- Click on the add button and add your domain in this manner ".yourdomain.com" (don't forget the leading dot)





Note:

ONLY HTTP TRAFFIC ON PORT 80 WILL BE Virus SCANNED

Means, that if a web server is running on a port other than 80, then traffic to this web server will **NOT** be Virus scanned!

So, if you only want to allow Virus scanned HTTP traffic, then you need to block traffic to any other ports. This could, for example, be done with a different IPCop Add-On named BlockOutTraffic. This Add-On can be found here:

http://firewalladdons.sourceforge.net/b
lockouttraffic.html

Note:

Clicking on the "Save settings" button will automatically restart the necessary services in order to apply your settings. Enable "Skip Service Restart" if you wish to skip restarting the service. Restart of HAVP and Privoxy service is required if any settings have been changed.

Notes:

- If Web Proxy is disabled, it will be enabled automatically, since HTTP Traffic scanning will only work on Web Proxy Traffic.
- All Web Browsers should be set up to use the Web Proxy except if Web Proxy is configured in transparent mode (no Browser Proxy settings are necessary)
- 3. Delete the cache of your Web Browser and Web Proxy before trying to download the eicar Test Virus and before accessing Privoxy Config and Bookmarklet
- 4. Do NOT enter an upstream Proxy in IPCop Web Proxy configuration!
- 5. If you wish to use an upstream Proxy, configure the PARENTPROXY parameter in copfilter/opt/havp/etc/havp.config
- Web Proxy logging will be enabled automatically, so that havp Virus logs will work





Fig. 14: HAVP in "action"



FTP Scanning

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<u>Eile Edit View Go B</u> ookmarks <u>T</u> ools <u>H</u> elp	Θ
The second seco	O Go C.
FTP Scanning (frox):	-
Deny access to virus infected FTP on 💌 downloads on GREEN**	
Note: Frox uses ClamAV (and F-PROT if installed) as a virus scanner	_
** Restart of frox service required Save settings	
Done	192.168.112.254:445 🛅 🎢

Fig. 15: FTP Scanning Settings within the Copfilter Web GUI

Options:

Deny access to Virus infected FTP downloads on **GREEN** Deny access to Virus infected FTP downloads on **BLUE** Deny access to Virus infected FTP downloads on **ORANGE**

BLUE and ORANGE interface options will only visible if these interfaces exist.

This will only work if either ClamAV or F-Prot (if installed) are enabled as well. This option enables FTP traffic scanning for Viruses. If a Virus is found, access to that file will be denied and your client will fail to download the file.

Be aware that when you try to download an ftp file. It might appear that your FTP client (for example a Web Browser or a command line FTP utility) is hanging. This is so because the FTP Proxy is already downloading the file in the background, and only sends a few bytes of this file to your FTP client. It will deliver the rest of the FTP file to your client only after it has fully downloaded and scanned the ftp file.

Again:

If you are using a Web Browser as an FTP client then you will receive the "save as" dialog only AFTER the FTP Proxy has successfully downloaded and scanned the FTP file. This could take a while so don't be confused if you do not get an immediate reply and if it seems that your web browser might be hanging. The FTP Proxy will send some bytes to your web browser from time to time to prevent it from running into a time-out.

Frox uses ClamAV as a Virus scanner and F-PROT if installed



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A A	
Alert 550 /products/eicar-file/eicar.com: Not a directory OK	
Done	11.

Fig. 15a: Frox in "action"

Notes:

Clicking on the Save settings button will automatically restart the necessary services in order to apply your settings. Enable "Skip Service Restart" if you wish to skip restarting the service. Restart of frox service is required if any setting has been changed.

AntiSpam

SpamAssassin Statistics (text)

This will show Spam/ham statistics including:

- number of Spam/ham messages received in each month of the year
- number of Spam/ham messages received in each day of the current month and current year
- scanning information about the last 200 received ham and Spam messages

SpamAssassin Statistics

- selectable year, month

-> will show statistics of that month, with percentage comparisons of ham and Spam

- selectable year, month, day

-> will show statistics of that day, with percentage comparisons of ham and Spam

Enable SpamAssassin (necessary to detect Spam)

Enable this option if you want to enable Spam detection, P3scan and ProxSMTP will not be able to detect Spam if this option is off.



Copfilter Whitelist Manager

A link to the Copfilter Whitelist Manager, which is a Blacklist as well

Copfilter Spam Digest Manager

A link to the Spam Digest Manager. Here you can enter the email addresses which should receive a Spam digest notification message. Copfilter will search for those email addresses in the Spam quarantine and send a digest notification message to each email address including brief information about the Spam messages that email address has received, this is done once a day (at about midnight)

Score required to identify email as Spam (subject will be modified)**

The threshold at which a email will be marked as Spam.

Razor, DCC, DNSBL** (improves recognition, decreases performance)

Enable or disable additional Spam checks which need to connect to the internet (dns lookup queries). This option greatly increases detection but email receival will be delayed (between 10-120sec depending on the email)

Send daily Spam digest (only from emails in Spam quarantine from the last 24h) to recipients in Digest Manager see the description above

German Rules**

This option will add additional german Spam checks.

SpamAssassin Bayes:

Enable Bayesian Scoring in SpamAssassin:

Turn this on if you want bayes scoring in SpamAssassin (it will be active after the first bayes training) After training the Bayes classifier, examine the email headers of any new email, they should contain bayes scoring, similar to: * 3.5 BAYES_99 BODY: Bayesian Spam probability is 99 to 100%

Run bayes training daily (0:55):

This allows you to train the Bayesian classifier in SpamAssassin by fetching emails from a remote IMAP server. On the IMAP server, create two folders on the same level like INBOX: "spam" and "not-spam". Copy or move at least 200 Spam and 200 non-spam emails into these folders (emails tagged as *** Spam *** can be used as well). All SpamAssassin related tags will be ignored while training.

If you have additional email header fields which should be ignored (for example if email ISP adds some headers then should add these you you to /var/log/Copfilter/default/opt/mail-spamassassin/etc/mail/spamassassin/local.cf and use the bayes_ignore_header parameter). No bayes scoring will occur if less than 200 emails are trained. Training takes about one hour for 400 emails. Execute tail -f /var/log/messages on the console to follow the status if you like (per email one dot will be printed)

Moving false negatives to the Spam folder and false positves to the non-spam folder will improve bayes scoring significantly. An email report with the results will be sent to Email Address



AntiSpam (SpamAssassi	n, P3PMail, Renattach, RulesDuJo	ur):	
SpamAssassin Statistics Year: 2005 ▼ Month: Jani Year: 2005 ▼ Month: Jani	SpamAssassin Statistics (text) uary – Show uary – Day: 1 – Show		
<u>SpamAssassin:</u>			
Score required to identify email as spam (subject will be <u>modified</u>)**	5 💌	<u>Razor, DCC, DNSBL**</u> (improves recognition, decreases performance)	on 💌
Send daily <u>spam digest</u> (only from emails in spam quarantine from the last 24h) to recipients in <u>Digest</u> <u>Manager</u>	on 💌	German Rules**	on 💌
<u>SpamAssassin Bayes:</u>			
Enable Bayesian Scoring in Spamassassin:	on 💌		
Run bayes training daily (0:55):	off 💌	IMAP SPAM Username:	username
IMAP Server:	imap.server.de	IMAP SPAM Password:	Johololololololololololololololololololo
 This allows you to train th On the IMAP server, creat Copy or move at least 201 as well) No bayes scoring will occu Execute the "Run Bayes T Training takes about one I Execute tail -f /var/log/md Moving false negatives to An email report with the r Now examine the email I * 3.5 BAYES_99 BODS Attachment renamer (ren Files with the following extens ADE, ADP, BAS, BAT, CHM, C LNK, MDB, MDE, MSC, MSL, W URL, VB, VBE, VBS, WSC, WS 	e Bayesian classifier in Spamassassi te two folders on the same level like 10 o spam and 200 not-spam emails into ir if less than 200 emails are trained raining Now" button (this will actually hour for 400 emails essages on the console to follow the s the spam folder and <u>false positives</u> to esults will be sent to <u>Email Address</u> headers of any new email, they shoul <i>Y: Bayesian spam probability is 99 to</i> attach): sions will be renamed, if bad attachm CMD, COM, CPL, CRT, EML, EXE, HLP, MSI, MSP, MST, NWS, OCX, PCD, PIF SF, WSH (manual configuration in	n by retching emails from a ret INBOX: "spam" and "not-spam" o these folders (emails tagged emtpy these folders on your : status if you like (per email on o the non-spam folder will impr ld contain bayes scoring, simil. 100% ent scanning has been enabled HTA, INF, INS, ISP, JS, JSE, , REG, SCR, SCT, SHB, SHS, o renattach.conf)	mote IMAP server. " as *** SPAM *** can be used IMAP server) e dot will be printed) rove bayes scoring significantly ar to: d.
Rules Du Jour: On 💌	improves recognition, but decreases	performance**	
Current rules_du_jour spa	am rules: Automatic update*:		Manual update:
sare_adult sare_bayes sare_e sare_evilnum sare_evilnum sa sare_obfu sare_oem sare_ran sare_specific sare_spoof sare_ sare_redirect sare_fraud bogus-virus-warnings casino co lasertoners medtable_obfu nig nigeria_newgen obfuscated ra rbl-combo sexmail sober_g so tripwire worm_found	vilnum re_genlsubj re_html dom uri sare_bml hickenpox geria_german ndom uber_p	1 days 💌	Update rules now
** Restart of spamd service (* Update <u>notifications</u> are ser	required nt to <u>Email Address</u>		
Save settings	Run Bayes Training	Now	
Fig. 16:	AntiSpam Settings w	ithin the Copfilt	er Web GUI



IMAP Server:

The Spam or ham messages need to train the bayesian classifier in SpamAssassin need to reside on an IMAP server in a "spam" and "no-spam" folder at the same level as "inbox". These options will be used to login into the IMAP server and retrieve those messages. After a successful download the messages will be deleted from those folders.

Rules Du Jour: improves recognition, but decreases performance*

Enabling rules du jour will enable SpamAssassin to use lots of Spam detection rulesets.

Current rules_du_jour Spam rules:

A list of currently used Spam detection rulesets

Automatic update:

Turn this on, if you want Copfilter to automatically download updates of Spam detection rulesets. This may happen once in one or two months.

Manual update:

Manually start the Spam detection ruleset update.

Run Bayes Training Now

Execute the "Run Bayes Training Now" button (this will actually emtpy these folders on your IMAP server)

Clicking on the "Save settings" button will automatically restart the necessary services in order to apply your settings. Enable "Skip Service Restart" if you wish to skip restarting the service. Restart of Spamd service is required if any setting of these settings have been changed:

- Enable SpamAssassin (necessary to detect Spam)
- Score required to identify email as Spam (subject will be modified)
- Razor, DCC, DNSBL (improves recognition, decreases performance)
- German Rules
- Rules Du Jour

The "Spam Quarantine" button will show a list of email messages, which were quarantined, because they were identified as Spam.



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<u>File</u>	<u>i</u> dit <u>V</u> ie	w <u>G</u> o	<u>B</u> ookr	narks	Īo	ols	Help																						0	0	
		- 🛃	×	6	C) htt	.ps://:	192.16	58.112	2.25	54:4	445/a	'cgi-b)in/s	pam_	_webç	jui/ind	dex.pl	hp		ć	<u> </u>] (G	• [G,					
Prefe	rences										-		_	-	_	_	_	_	_	_	_	_	-	_	-	_	_		_		-
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An as	sterick (*) can be	e used :	asa"v	wild	card	" for g	greate	erflex	dbili	lity.	For	r exa	mp	le:																
	● *@sp ● *@*.s	amisp.(pamisp	com ap).com a	plies ti pplies	o ev ; to e	ery a every	ddre addi	ess at ress a	the d at any	om 'su	nair Jb-c	n "sp dom	pam nain	nisp of":	.con spar	n" misp	.com	n													
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Fig. 17: The Copfilter Whitelist/Blacklist Manager



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Cop	DERVICE		COPFILIER	1		The bad packets stop here.	Se .	
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1	Copfilter	:						
	Copfil	ter lo	a files:					
	•	•	-					
	Spam Quar	antine - PO	P3 - /var/log/c	opfilter/default/	opt/p3sc	an/quarantine		
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					[12.8/7.0	j Re: - cut-up paper. Iney	20050825_23:20	:00 p3scan.nne371
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				and the second second	[18.7/7.0] Re[4]: Pritchard Elstone Augustsson Zikmund	ova 20050827_23:57	:24 p3scan.VcUrw1
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Fig. 18: The Spam Quarantine list, accessible through the Copfilter Web GUI



AntiVirus

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Fig. 19: AntiVirus Settings within the Copfilter Web GUI

ClamAV:

Turn ClamAV on to enable Virus scanning. P3Scan and Proxsmtpd will not be able to detect Viruses if this setting is off.

Block encrypted archives**:

If this option is enabled, clamav will treat encrypted archives as if they were Viruses. This might be useful if a encrypted attachment contains a Virus (the password might be in the email itself, encouraging users to open the encrypted attachment)

ClamAV Statistics (Text) (immediate updates)

This will show Virus statistics including:

- List of most detected Viruses (with percentage value)
- text statistics, Viruses by hour/day/month and year
- exact number of Viruses received in each month of the year
- exact number of Viruses received in each day of the current month and current year
- list of the last 200 received Viruses
- Graph (weekly updates, starts after one week)

These statistics start after one week (the scripts will analyze only the rotated log files from logrotate, and the first rotation is in a week).

Current Virus signatures:

List of current ClamAv signatures with timestamps.



Automatic update:

Enable automatic Virus signature updating with this option

Manual update:

This allows a user to manually update the Virus signatures, for example in an event of a Virus outbreak

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Fig. 20: Copfilter's ClamAV Statistics, accessible through the Web GUI



If f-prot has been installed these menu will appear:

F-PROT:

Current Virus signatures:

List of current clamav signatures with timestamps

Automatic update**:

Enable automatic Virus signature updating with this option

Manual update:

This allows a user to manually update the Virus signatures, for example in an event of a Virus outbreak.

Attachment Renamer (renattach):

Files with the following extensions will be renamed, if dangerous attachment scanning has been enabled:

ADE, ADP, BAS, BAT, CHM, CMD, COM, CPL, CRT, EML, EXE, HLP, HTA, INF, INS, ISP, JS, JSE, LNK, MDB, MDE, MSC, MSH, MSI, MSP, MST, NWS, OCX, PCD, PIF, REG, SCR, SCT, SHB, SHS, URL, VB, VBE, VBS, WSC, WSF, WSH (manual configuration in renattach.conf)

This is an information about attachment extensions which will be renamed, if attachment renaming has been enabled in P3Scan or ProxSMTP.

The "Virus Quarantine" button will show a list of unmodified email messages, which were quarantined, because they contained a Virus.

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Notes:

Clicking on the Save settings button will automatically restart the necessary services in order to apply your settings. Enable "Skip Service Restart" if you wish to skip restarting the service. Restart of clamd service is required if clamav settings has been changed.

TESTING

```
Send Test Virus Email
Send Test Spam Email
Send Test Email+bad Attachment
```

These options send emails to the Email Address given on the Email Settings page, for testing purposes.





Setup

Since the /var/log directory resides on the biggest partition on every IPCop installation, Copfilter will be installed into /var/log/Copfilter

Setup_util script command line parameters

Usage: setup_util OPTION Options: _____ -a, --addmenu add Copfilter menu to the Web GUI (already done with -i) _____ -b, --backup [FILE] backup current settings & logfiles (optional: backup file) _____ -d, --default restore default configuration _____ -i, --install [--force] install (or reinstall) Copfilter (use force if already installed) -f, --fprot FILE install F-Prot, FILE: download and copy F-Prot >GZIP-ed TAR file< to IPCop from this Url: http://www.f-prot.com/download/home_user/download_fplinux.html example: setup_util -f fp-linux-ws.tar.gz _____ -r, --restore [FILE] restore configuration (optional: restore file) _____ -R, --regrazor register razor



-u, --uninstall

uninstall Copfilter and F-Prot

-V, --version

print version information and exit

-x, --fixbackspace

fix backspace key in vi
