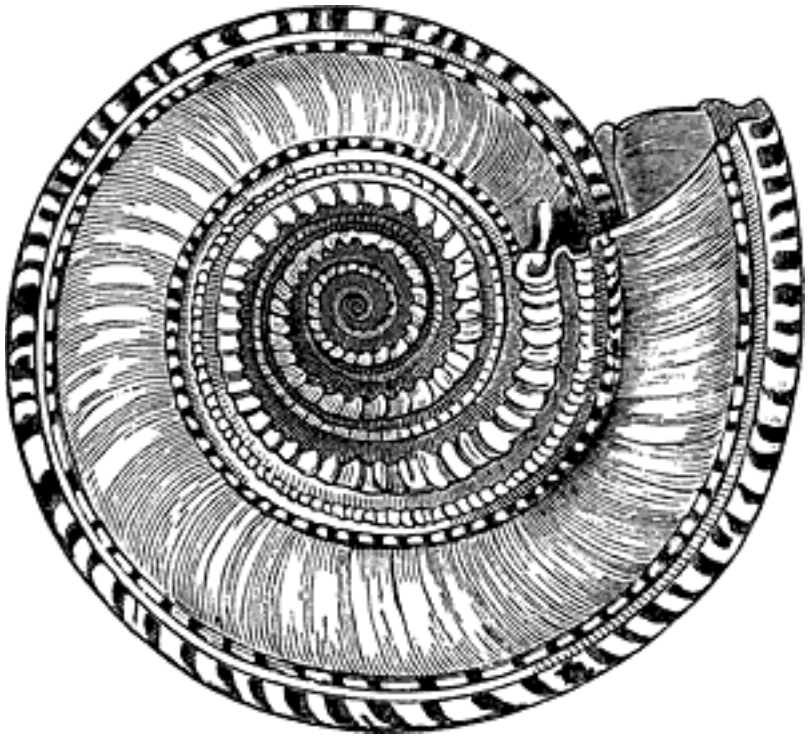
Enhanced version - no round corners!

GAiA EDITION
Updated for R77.30

UNIfw1lr

Firewall log rotation made simple



Niels Thomas Haugård

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Introduction

UNIfw1lr - *UNI•C FireWall-1 Log Rotation* - is a simple firewall log rotation and log management solution for Check Point firewall-1 made by UNI•C, now i2.dk.

This version is compatible with GAiA and has been tested on Check Point R77.10, R77.20 and R77.30, and should work with all later R77.x versions, both appliances and open servers. It is not compatible with Secure Platform.

Once installed all firewall logs gets

1. rotated on a daily basis
2. exported to a CSV text file with each field described in the first line
3. processed by report generator that generates top 10 reports on
    - accepted traffic
    - dropped and rejected traffic
    - attacks

The log files will be visible through the *Check Point Log Viewer* for a specific number of days (default 10), then compressed and left in the filesystem for default 20 days more, before they are deleted.

All files are available for download from a SSL enabled WebServer (installed with the firewall) running on TCP port 9876. The WebServer uses the certificate from defaultCert.

UNIfw1lr is free software and released under a modified BSD License, see LICENSE. Using the software requires a valid support contract with Check Point Technologies.

Prerequisites and caveats

Please *disable all Check Point log rotation configurations*, as it will interfere with **UNIfw1lr** and prevent purging of logs rotated by Check Point due to differences in log file naming.

Installation

UNIfw1lr is installed as a package (RPM) and requires the package **UNItools** to be installed first. UNIfw1lr is installed on the management station. It may also be installed on enforcement modules, to avoid filling the filesystem with log files in case of error(s).

How does UNIfw1lr work

UNIfw1lr runs every day at **23:59**. It does log file house keeping according to its configuration file stored in `/var/opt/UNIfw1lr/etc/fw1logrotate.conf`.

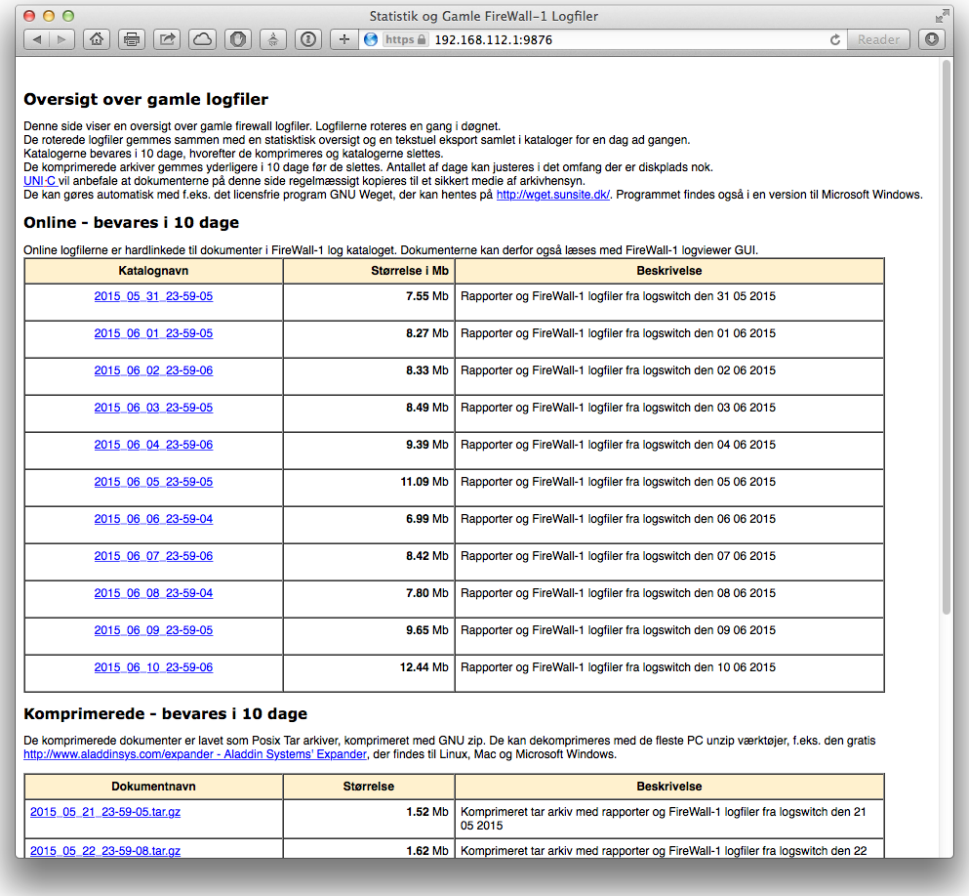
- The *active firewall log* is switched and the old log file exported to a
- cvs file. The first line describes the fields. The exported file may be quite large and on a busy system exceed 2,147.483.647 Gb which may cause problems on 32bit systems (see 2GB file-size limit).

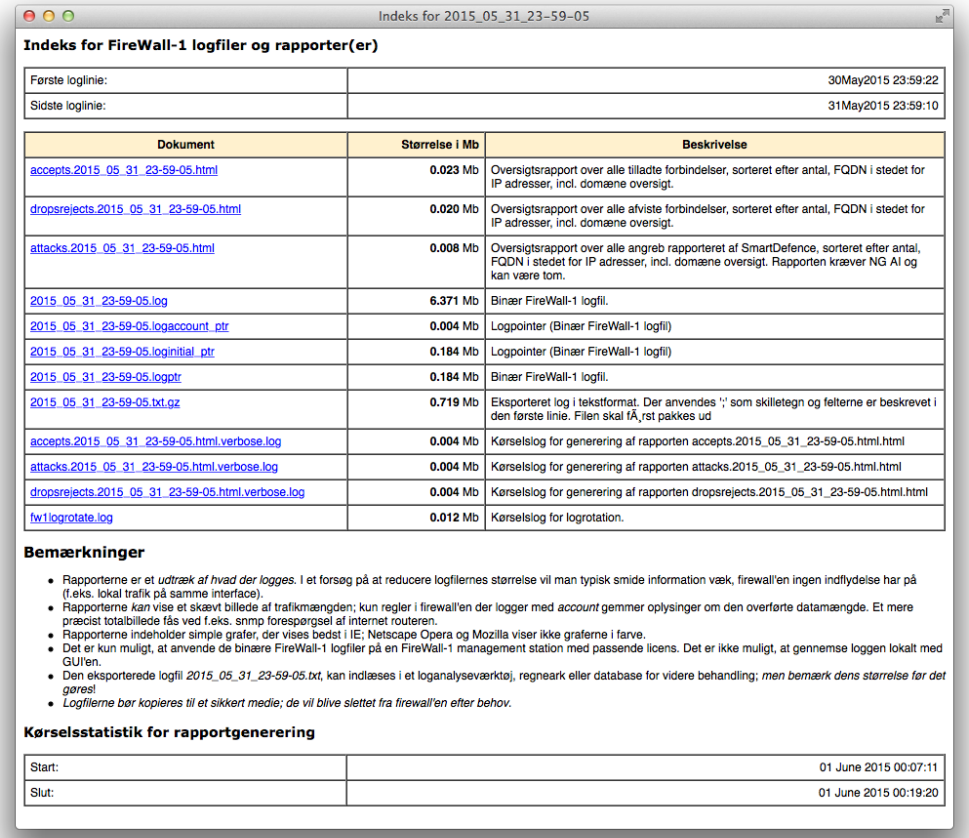
- Tree reports are made based on the exported log:
  - **top 10 accepted** for *rules*, *source*, *destination* and *protocol*.
  - **top 10 dropped and rejected** for *rules*, *source*, *destination* and *protocol*.
  - **top 10 attack** for *rules*, *source*, *destination* and *protocol*.
- Logfiles older than a specific date (default 10) is compressed.
- Compressed log files older than a specific date (default 20) is deleted.

The reports are made with fwlogsum 5.0.2 © 1996-2004 Peter Sundstrom, peter@ginini.com. This may be changed in default.report.sh.

UNIfw1lr starts an SSL enabled WebServer on boot. The server is part of the base operating system and maintained by Check Point. The server binds to a specific IP address and TCP port 9876. The server does not require login and password and should be restricted to e.g. the admin group and e.g. a log consolidator system.

An example is shown here:





In the example the server is bound on `192.168.112.1` so the server URL is

```
https://192.168.112.1:9876
```

Notice that the SSL certificate will cause a browser warning.

The servers configuration file is `/var/opt/UNIfw1lr/etc/httpd2.conf`. The default bind address is 127.0.0.1.

What not to expect from UNIfw1lr

UNIfw1lr is not a replacement for Check Point SmartLog but primarily a tool to rotate and compress log files, and make them available for a log archiver.

Using UNIfw1lr

UNIfw1lr should be accessed by a *log consolidator* for collecting and archiving log files. A simple shell script (`get_firewall_logs.sh`) which will collect the log files from an external server is located in `/var/opt/UNIfw1lr/docs`.

If you choose to use GNU wget / wget for windows you may use the bash for windows snipet:

```
wget -N --reject 'index.html' -r -m --no-check-certificate \
https://${SRVR}:${PORT} > ${TMPFILE} 2>&1
ERRORS=$?
case $ERRORS in
0) MSG="wget: No problems occurred."
;;
1) MSG="wget: Generic error code."
;;
2) MSG="wget: Parse error"
;;
3) MSG="wget: File I/O error."
;;
4) MSG="wget: Network failure."
;;
5) MSG="wget: SSL verification failure."
;;
6) MSG="wget: Username/password authentication failure."
;;
7) MSG="wget: Protocol errors."
;;
8) MSG="wget: Server issued an error response"
;;
esac
```

Known limitations

- **UNIfw1lr** uses hard links to minimize disk usage. This requires all files to reside on the same partition: `$FWDIR/log` and the directory used by **UNIfw1lr** to store files must be on the same partition. This is ensured during package installation.
- R77.xx comes in two flavors: 32bit and 64bit. Smaller appliances like the 2200 series has a 32bit CPU and therefore suffers from the 2.1Gb file size limitation.