

Linux Weekopdracht 3

Rutger Harmers

Opdracht 1

```
[a-zA-Z._-]{1,}[a-zA-Z0-9]@shaw((.com)|(.net))
```

Deze regular expression herkent alle mailadressen van het bedrijf shaw met tld .net en .com.

```
rutgerh@ubuntu:~/Documents$ grep -E -o "[a-zA-Z._-]{1,}[a-zA-Z0-9]@shaw((.com)|(.net))" access_log.txt
ppwctwentyntne@shaw.com
```

Opdracht 2

A.

Syslog voor logging:

```
rutgerh@ubuntu:~$ syslog-ng -V
syslog-ng 3 (3.25.1)
Config version: 3.25
Installer-Version: 3.25.1
Revision: 3.25.1-3
Compile-Date: Mar  3 2020 19:39:43
Module-Directory: /usr/lib/syslog-ng/3.25
Module-Path: /usr/lib/syslog-ng/3.25
Include-Path: /usr/share/syslog-ng/include
Available-Modules: confgen,tfgetent,system-source,afsql,graphite,stardate,cef,redis,timestamp,xml,disk-buffer,json-plugin,afuser,linux-kmsg-format,pacctformat,rlemann,http,mod-python,syslogformat,kvformat,sdjournal,cryptofuncs,afstomp,appnodel,dbparser,geop2-plugin,basicfuncs,snmptrapd-parser,afmongodb,afprog,afsmtp,add-contextual-data,tags-parser,pseudofile,hook-commands,csvparser,afsocket,affile,map-value-pairs,examples,afanqp
Enable-Debug: off
Enable-GProf: off
Enable-Memtrace: off
Enable-IPv6: on
Enable-Spoof-Source: on
Enable-TCP-Wrapper: on
Enable-Linux-Caps: on
Enable-Systemd: on
```

Munin voor monitoring:

```
rutgerh@ubuntu:~$ sudo apt install munin
[sudo] password for rutgerh:
Sorry, try again.
[sudo] password for rutgerh:
Reading package lists... Done
Building dependency tree
Reading state information... Done
munin is already the newest version (2.0.56-1ubuntu1).
The following packages were automatically installed and are no longer required:
  libestr0 libfastjson4
Use 'sudo apt autoremove' to remove them.
0 upgraded, 0 newly installed, 0 to remove and 99 not upgraded.
rutgerh@ubuntu:~$
```

B.

```
rutgerh@ubuntu:~$ sudo systemctl status apache2
● apache2.service - The Apache HTTP Server
   Loaded: loaded (/lib/systemd/system/apache2.service; enabled; vendor prese
   Active: active (running) since Fri 2022-01-14 02:33:44 PST; 1h 39min ago
     Docs: https://httpd.apache.org/docs/2.4/
    Main PID: 915 (apache2)
      Tasks: 55 (limit: 4599)
     Memory: 8.9M
    CGroup: /system.slice/apache2.service
            └─ 915 /usr/sbin/apache2 -k start
               3310 /usr/sbin/apache2 -k start
               3311 /usr/sbin/apache2 -k start

Jan 14 02:33:44 ubuntu systemd[1]: Starting The Apache HTTP Server...
Jan 14 02:33:44 ubuntu apachectl[884]: AH00558: apache2: Could not reliably det
Jan 14 02:33:44 ubuntu systemd[1]: Started The Apache HTTP Server.
Jan 14 02:45:54 ubuntu systemd[1]: Reloading The Apache HTTP Server.
Jan 14 02:45:54 ubuntu apachectl[3309]: AH00558: apache2: Could not reliably de
Jan 14 02:45:54 ubuntu systemd[1]: Reloaded The Apache HTTP Server.
```

C.

```
rutgersserver@server:~$ sudo apt-get install apache2
Reading package lists... Done
Building dependency tree
Reading state information... Done
apache2 is already the newest version (2.4.41-4ubuntu3.9).
0 upgraded, 0 newly installed, 0 to remove and 38 not upgraded.
rutgersserver@server:~$ _
```

Apache2 is actief:

```
rutgersserver@server:~$ sudo systemctl status apache2
● apache2.service - The Apache HTTP Server
   Loaded: loaded (/lib/systemd/system/apache2.service; enabled; vendor preset: enabled)
   Active: active (running) since Fri 2022-01-14 12:29:59 UTC; 6min ago
     Docs: https://httpd.apache.org/docs/2.4/
   Process: 19828 ExecStart=/usr/sbin/apachectl start (code=exited, status=0/SUCCESS)
    Main PID: 19843 (apache2)
       Tasks: 11 (limit: 4576)
      Memory: 14.5M
    CGroup: /system.slice/apache2.service
            └─19843 /usr/sbin/apache2 -k start
              └─19854 /usr/sbin/apache2 -k start
                └─19855 /usr/sbin/apache2 -k start
                  └─19856 /usr/sbin/apache2 -k start
                    └─19857 /usr/sbin/apache2 -k start
                      └─19858 /usr/sbin/apache2 -k start
                        └─20166 /usr/sbin/apache2 -k start
                          └─20182 /usr/sbin/apache2 -k start
                            └─20183 /usr/sbin/apache2 -k start
                              └─20184 /usr/sbin/apache2 -k start
                                └─20185 /usr/sbin/apache2 -k start

Jan 14 12:29:59 server systemd[1]: Starting The Apache HTTP Server...
Jan 14 12:29:59 server apachectl[19842]: AH00558: apache2: Could not reliably determine the server's
Jan 14 12:29:59 server systemd[1]: Started The Apache HTTP Server.
```

D.

```
GNU nano 4.8 /etc/munin/munin.conf
# Example configuration file for Munin, generated by 'make build'

# The next three variables specifies where the location of the RRD
# databases, the HTML output, logs and the lock/pid files. They all
# must be writable by the user running munin-cron. They are all
# defaulted to the values you see here.
#
dbdir /var/lib/munin
htmldir /var/cache/munin/www
logdir /var/log/munin
rundir /var/run/munin

# Where to look for the HTML templates
#
tmpdir /etc/munin/templates
```

```
GNU nano 4.8 /etc/munin/apache.conf
Alias /munin/var/cache/munin/www

<Directory /var/www/munin>
    Order allow,deny
    Allow from localhost 127.0.0.0/8 ::1
    Allow from all
    Options None
```

```
# The related apache settings can be adjusted at the end of this file.
#
# See /usr/share/doc/munin/README.Debian for details.

# ***** COMMON SETTINGS FOR ALL STRATEGIES *****

ScriptAlias /munin-cgi/munin-cgi-graph /usr/lib/munin/cgi/munin-cgi-graph
Alias /munin/static/ /var/cache/munin/www/static/

<Directory /var/cache/munin/www>
    Require all granted
    Options FollowSymLinks SymLinksIfOwnerMatch
</Directory>

<Directory /usr/lib/munin/cgi>
    Require local
    <IfModule mod_fcgid.c>
        SetHandler fcgid-script
    </IfModule>
    <IfModule !mod_fcgid.c>
        SetHandler cgi-script
    </IfModule>
</Directory>

# ***** SETTINGS FOR CGI/CRON STRATEGIES *****

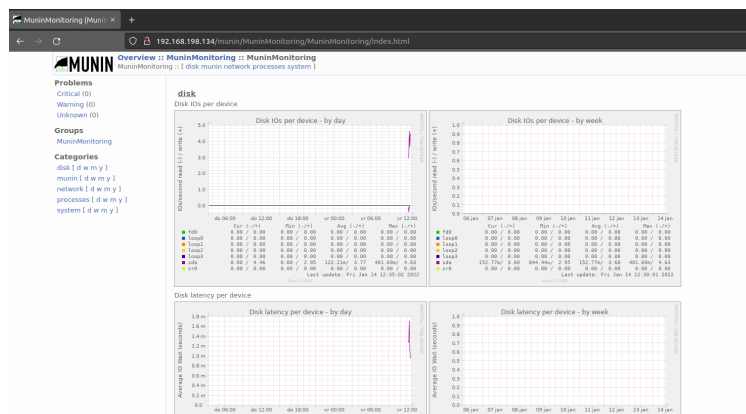
rutgersserver@server:~$ service apache2 restart
==== AUTHENTICATING FOR org.freedesktop.systemd1.manage-units ====
Authentication is required to restart 'apache2.service'.
Authenticating as: Rutger (rutgersserver)
Password:
==== AUTHENTICATION COMPLETE ====
```

```

rutgerserver@server:~$ ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
        valid_lft forever preferred_lft forever
2: ens33: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    link/ether 00:0c:29:b0:0e:4b brd ff:ff:ff:ff:ff:ff
    inet 192.168.198.134/24 brd 192.168.198.255 scope global dynamic ens33
        valid_lft 1634sec preferred_lft 1634sec
    inet6 fe80::20c:29ff:feb0:e4b/64 scope link
        valid_lft forever preferred_lft forever

```

Na de apache2 server restart kan ik de server monitoren vanuit de monitor



This screenshot shows a web browser window displaying the MuninMonitoring interface. The browser's address bar shows the URL 'ubuntu.local/munin/MuninMonitoring/MuninMonitoring/index.html#apache'. The page title is 'Overview :: MuninMonitoring :: MuninMonitoring'. The left sidebar is identical to the previous screenshot. The main content area shows the 'apache' group with the title 'Apache accesses'. Below this, there is a graph titled 'Apache accesses - by day'. In the bottom right corner, a terminal window is open, showing the prompt 'rutgerh@ubuntu: ~\$'.

Extra beveiliging:

```

<Directory />
Options -Indexes
AllowOverride None
</Directory>

```

