# Documentatie fail2ban installeren in virtuele omgeving en deployment on bare-metal

Documentatie type	Link
Online markdown documentation	github.com
Online pdf documentation	github.com

## Table of contents

- Documentatie fail2ban installeren in virtuele omgeving en deployment on bare-metal
  - Table of contents
  - Installatie fail2ban op ubuntu server
  - Configuratie fail2ban op ubuntu server
    - Findtime
    - Maxretry
    - Bantime
  - Configureer fail2ban opdracht
  - Testen van fail2ban service
  - Resultaten bans / jails

## Installatie fail2ban op ubuntu server

```
sudo apt install fail2ban -y
```

## Configuratie fail2ban op ubuntu server

```
sudo cp jail.conf jail.local
```

#### **Findtime**

```
103 # A host is banned if it has generated "maxretry" during the last "findtime"
104 # seconds.
105 findtime = 10m
```

#### Maxretry

```
107 # "maxretry" is the number of failures before a host get banned.
108 maxretry = 5
```

#### Bantime

```
100 # "bantime" is the number of seconds that a host is banned.
101 bantime = 10m
```

## Configureer fail2ban opdracht

```
[DEFAULT]
bantime = 15m
findtime = 3m
maxretry = 6

[sshd]
port = ssh
logpath = %(sshd_log)s
backend = %(sshd_backend)s
```

Aangezien de service al actief was moet deze herstart worden zodat de aanpassingen in de config file kunnen worden opgenomen.

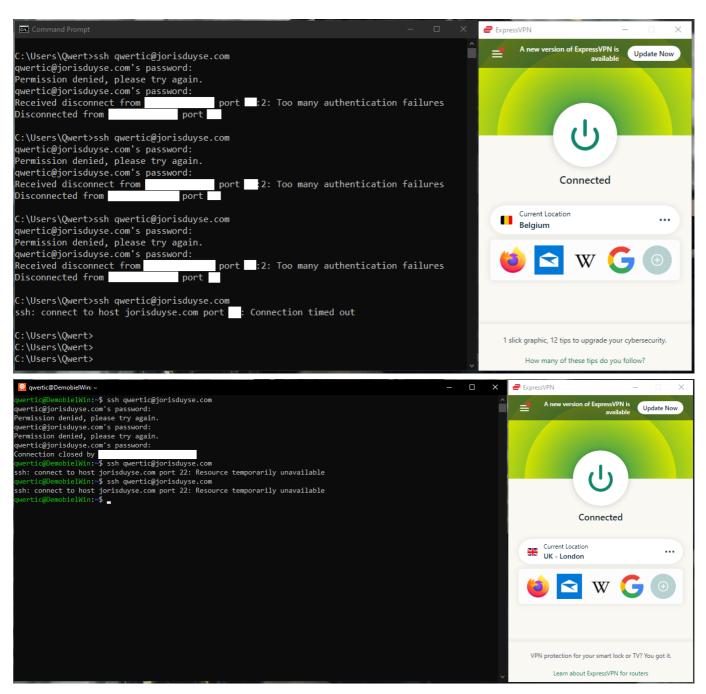
```
systemctl status fail2ban.service
```

```
qwertic@cplex: ~
                                                                                            qwertic@cplex:~$ qwertic@cplex:~$ systemctl status fail2ban.service
 fail2ban.service - Fail2Ban Service
    Loaded: loaded (/lib/systemd/system/fail2ban.service; enabled; vendor preset: enabled)
    Active: active (running) since Sat 2022-03-19 13:21:28 UTC; 1h 19min ago
      Docs: man:fail2ban(1)
  Main PID: 24241 (f2b/server)
     Tasks: 5 (limit: 9306)
    Memory: 18.0M
    CGroup: /system.slice/fail2ban.service
             —24241 /usr/bin/python3 /usr/bin/fail2ban-server -xf start
Mar 19 13:21:28 cplex systemd[1]: Starting Fail2Ban Service...
Mar 19 13:21:28 cplex systemd[1]: Started Fail2Ban Service.
Mar 19 13:21:28 cplex fail2ban-server[24241]: Server ready
qwertic@cplex:~$
```

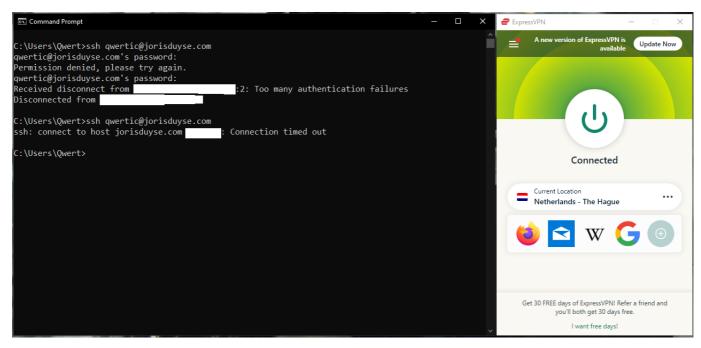
```
$ sudo systemctl reload fail2ban.service #ssh connection crashed; sign it works?
[sudo] password for qwertic:
client_loop: send disconnect: Connection reset
```

## Testen van fail2ban service

Wanneer het ip wordt gemerkt toont ssh in **cmd** echter Connection timed out in plaats van ssh: connect to host server.hostname.com port 2022: Connection refused. In **Ubuntu 20.04 on Windows** komt de error ssh: connect to host jorisduyse.com port 22: Resource temporarily unavailable



"Test wanner **maxretry** in jail.local op **6** staat"



<sup>&</sup>quot;Test wanner **maxretry** in jail.local op **1** staat"

## Resultaten bans / jails

```
sudo iptables -n -L #list of banned ip adresses
```

```
qwertic@cplex: ~
wertic@cplex:~$ sudo iptables -n -L
Chain INPUT (policy ACCEPT)
          prot opt source
                                         destination
target
f2b-sshd
           tcp -- 0.0.0.0/0
                                         0.0.0.0/0
                                                               multiport dports 22
Chain FORWARD (policy ACCEPT)
target
          prot opt source
                                         destination
Chain OUTPUT (policy ACCEPT)
          prot opt source
                                         destination
target
Chain f2b-sshd (1 references)
          prot opt source
                                         destination
target
REJECT
                                         0.0.0.0/0
                                                               reject-with icmp-port-unreachable
REJECT
                                         0.0.0.0/0
           all
                                                               reject-with icmp-port-unreachable
REJECT
                                         0.0.0.0/0
                                                               reject-with icmp-port-unreachable
                                         0.0.0.0/0
                                                               reject-with icmp-port-unreachable
REJECT
                                         0.0.0.0/0
REJECT
                                                               reject-with icmp-port-unreachable
REJECT
                                         0.0.0.0/0
                                                               reject-with icmp-port-unreachable
          all
                                                               reject-with icmp-port-unreachable
REJECT
                                         0.0.0.0/0
                                         0.0.0.0/0
REJECT
                                                               reject-with icmp-port-unreachable
                                         0.0.0.0/0
RETURN
          all
```