

# Pi-hole DNS Ad-blocking Server

Networkwide ad blocking via your own Linux hardware. No client-side software required



- <https://pi-hole.net/>

Deprecated!

## Installation von Docker und Docker-Compose

1. Update the System and install Docker:

```
# apt-get update
# apt-get upgrade

# apt-get install docker
```

2. Compile and install docker-compose:

```
# cd /tmp/
# git clone https://github.com/docker/compose.git

# cd compose
# docker build -t docker-compose:armhf -f Dockerfile.armhf .
# docker run --rm --entrypoint="script/build/linux-entrypoint" -v
$(pwd)/dist:/code/dist -v $(pwd)/.git:/code/.git "docker-compose:armhf"

# ls -l
# cp dist/docker-compose-Linux-armv7l /usr/local/bin/docker-compose
# chmod 0755 /usr/local/bin/docker-compose

# docker-compose version
```

3. Install manpages for docker-compose:

```
# curl -L
https://raw.githubusercontent.com/docker/compose/$(docker-compose
version --short)/contrib/completion/bash/docker-compose -o
/etc/bash_completion.d/docker-compose
```

## Vorbereitung und Deployment von Pi-hole

1. Erstellen des benötigten Verzeichnisses:

```
# mkdir /opt/docker-pihole
```

2. Anlegen des docker-compose files für Pi-hole:

```
# vim /opt/docker-pihole/docker_compose.yml
```

```
version: "3"

services:
  # -----
  -----
  pihole:
    image: diginc/pi-hole-multiarch:debian_armhf
    container_name: "pihole-main"
    volumes:
      - /opt/docker-pihole/pihole/:/etc/pihole/
      - /opt/docker-pihole/dnsmasq.d/:/etc/dnsmasq.d/
      - /etc/localtime:/etc/localtime:ro
    environment:
      - VIRTUAL_HOST=www.blackgate.org
      - ServerIP=192.168.1.6
      - DNS1=192.168.1.1
      - TZ=Europe/Zurich
      - WEBPASSWORD=ADMIN_PASSWORD
    ports:
      - 53:53/tcp
      - 53:53/udp
      - 81:80
    networks:
      - local
    restart: always

  # -----
  -----
  networks:
    local:
      driver: bridge
```

3. Starten und aktivieren des Pi-hole Docker Containers:

```
# docker-compose -f /opt/docker-pihole/docker_compose.yml up -d
# docker ps
```

# Konfiguration von Apache für Reverse Proxy kompatibles Pi-hole Setup /

## Pi-hole Virtual-Host Setup

1. Anlegen eines lokalen Virtual-Hosts für Pi-hole:

```
# vim /etc/apache2/sites-available/blackgate.org.conf
```

```
<VirtualHost *:80>
# ServerName blackgate.org
ServerName localhost
#
  ServerAdmin michael.r467@gmail.com
  DocumentRoot /var/www/html

  <Directory /var/www/html/>
    <FilesMatch "a.gif$">
      Header set Cache-Control "max-age=290304000, public"
    </FilesMatch>

    RewriteEngine On
    RewriteBase "/"

    RewriteRule ^wakeonlan($|/) - [L]

    #Rewrite all other requests to empty file!
    RewriteCond %{REQUEST_FILENAME} !-f
    RewriteCond %{REQUEST_FILENAME} !-d
    RewriteCond %{REQUEST_FILENAME} !-l
    RewriteRule ^(.*)$ http://192.168.1.6/a.gif
  </Directory>
#
</VirtualHost>
```

## Reverse Proxy Beispiel Setup

```
# vim /etc/apache2/sites-available/blackgate.org.conf
```

```
<VirtualHost *:443>
  ServerName www.blackgate.org
  #
  ServerAdmin ${blackgate_serveradmin}
  Header always set Strict-Transport-Security "max-age=63072000;
includeSubdomains; preload"
  SSLEngine on
  SSLCertificateFile ${blackgate_ssl_path}/cert.pem
  SSLCertificateKeyFile ${blackgate_ssl_path}/privkey.pem
  SSLCertificateChainFile ${blackgate_ssl_path}/chain.pem

  ProxyPass /error_docs !
  ErrorDocument 503 /error_docs/ServiceUnavailable.html

  RewriteEngine on
  RewriteRule ^/pi-hole$ /pi-hole/ [R]

  ProxyPass          /pi-hole/ http://127.0.0.1:81/admin/
  ProxyPassReverse  /pi-hole/ http://127.0.0.1:81/admin/

  ProxyPass          / http://192.168.1.21/
  ProxyPassReverse  / http://192.168.1.21/

  <Proxy http://127.0.0.1:81/admin/>
    Order deny,allow
    Allow from all
    AuthType Basic
    AuthName "Password Required"
    AuthUserFile /etc/apache2/.htpasswd
    Require valid-user
  </Proxy>
</VirtualHost>
```

## Weiteres



1. Add Domain to authorized Hostnames on pi-hole:

```
# vim /var/www/html/admin/scripts/pi-hole/php/auth.php
```

```
$AUTHORIZED_HOSTNAMES = array(
    $ipv4,
    $ipv6,
    str_replace(array("[", "]"), array("", "")),
    $_SERVER["SERVER_NAME"]),
```

```
"pi.hole",  
"localhost",  
"www.blackgate.org"  
);
```

Last update: **2018/11/06 10:32**