

FreeBSD Administration - Support #757

Install Piwik on FreeBSD

02/27/2016 10:53 PM - Daniel Curtis

Status:	Closed	Start date:	02/28/2016
Priority:	Normal	Due date:	
Assignee:	Daniel Curtis	% Done:	100%
Category:	Web Server	Estimated time:	1.00 hour
Target version:	FreeBSD 9	Spent time:	1.50 hour

Description

This is a guide on setting up Piwik with Nginx on FreeBSD 9.

Prepare the Environment

- Before installation of the components, make sure everything is up to date using the following command:

```
pkg update -f && pkg upgrade
```

- Install portmaster:

```
cd /usr/ports/ports-mgmt/portmaster
make install clean
pkg2ng
```

- Create the piwik user:

```
pw user add -n piwik -m -s /sbin/nologin -c "Piwik"
```

Install Nginx

- Install Nginx

```
pkg install nginx
```

- Start and enable nginx at boot:

```
echo 'nginx_enable="YES"' >> /etc/rc.conf
service nginx start
```

- Create a configuration directory to make managing individual server blocks easier

```
mkdir /usr/local/etc/nginx/conf.d
```

- Edit the main nginx config file:

```
vi /usr/local/etc/nginx/nginx.conf
```

- And strip down the config file and add the include statement at the end to make it easier to handle various server blocks:

```
worker_processes 1;
error_log /var/log/nginx-error.log;

events {
    worker_connections 1024;
}

http {
    include mime.types;
    default_type application/octet-stream;
    sendfile on;
    keepalive_timeout 65;

    # Load config files from the /etc/nginx/conf.d directory
    include /usr/local/etc/nginx/conf.d/*.conf;
}
```

Install MySQL Server

- Start by installing the mysql56-server and mysql56-client packages:

```
pkg install mysql56-{server,client}
```

- Copy a base MySQL configuration to use:

```
cp /usr/local/share/mysql/my-default.cnf /var/db/mysql/my.cnf
```

- Edit the mariadb config to change the max packet size:

```
vi /var/db/mysql/my.cnf
```

- and modify max_allowed_packet to 32M

```
max_allowed_packet = 32M
```

- Enable and start mysql at boot:

```
echo 'mysql_enable="YES"' >> /etc/rc.conf
service mysql-server start
```

- Prepare the database for use by running the secure installation:

```
mysql_secure_installation
```

- **NOTE:** Choose a strong root password and answer yes to all questions.

Create MySQL Databases and Users

- Login to MySQL and create appropriate databases and users.

```
mysql -u root -p
```

- and run the following SQL queries to create the **piwikdb** database and **piwikuser** user:

```
CREATE DATABASE piwikdb CHARACTER SET utf8;

CREATE USER 'piwikuser'@'localhost' IDENTIFIED BY 'SuperSecretPassword';

GRANT ALL PRIVILEGES ON piwikdb.* TO 'piwikuser'@'localhost';

FLUSH PRIVILEGES;

quit
```

Install PHP

- Install PHP 5.6 and a few extensions:

```
pkg install php56 php56-mbstring php56-simplexml php56-openssl
```

- Configure the default PHP settings

```
cp /usr/local/etc/php.ini-production /usr/local/etc/php.ini
```

- Create a directory for the php-fpm configs:

```
mkdir /usr/local/etc/php-fpm.d
```

- Edit /usr/local/etc/php-fpm.conf:

```
vi /usr/local/etc/php-fpm.conf
```

- Make the following changes:

```
include=/usr/local/etc/php-fpm.d/*.conf
```

- Enable PHP-FPM at boot:

```
echo 'php_fpm_enable="YES"' >> /etc/rc.conf
```

- Restart nginx:

```
service nginx restart
```

Install Piwik

- Install piwik:

```
pkg install piwik
```

- Create an **piwik.example.com server block** config file:

```
vi /usr/local/etc/nginx/conf.d/piwik.example.com.conf
```

- Add the following:

```
upstream piwik-handler {
    server unix:/var/run/piwik.example.com-php-fpm.sock;
}

server {
    listen 80;
    server_name piwik.example.com;
    root /usr/local/www/piwik/;
    index index.php;

    location = /robots.txt {
        allow all;
        log_not_found off;
        access_log off;
    }

    location ~ ^/(?:CHANGELOG\.md|config|README.md) {
        deny all;
    }

    location / {
        try_files $uri $uri/ =404;
    }

    location ~ /\.php(?:$|/) {
        fastcgi_split_path_info ^(.+\.(php))(/.+)$;
        include fastcgi_params;
        fastcgi_param SCRIPT_FILENAME $document_root$fastcgi_script_name;
        fastcgi_param PATH_INFO $fastcgi_path_info;
        fastcgi_pass piwik-handler;
        fastcgi_intercept_errors on;
    }
}
```

- Create the piwik php-fpm pool config file:

```
vi /usr/local/etc/php-fpm.d/piwik.example.com.conf
```

- And add the following:

```
[piwik.example.com]
user = piwik
group = www
listen = /var/run/piwik.example.com-php-fpm.sock
listen.owner = piwik
listen.group = www
pm = dynamic
pm.max_children = 5
pm.start_servers = 2
pm.min_spare_servers = 1
pm.max_spare_servers = 3
php_admin_value[session.save_path] = "/usr/local/www/piwik/tmp"
php_admin_value[always_populate_raw_post_data] = "-1"
```

- Change the ownership of the piwik directory:

```
chown -R piwik:www /usr/local/www/piwik
```

- Restart nginx and start php-fpm:

```
service nginx restart  
service php-fpm start
```

- Now open up a web browser and go to <http://piwik.example.com> to finish the setup process.

History

#1 - 02/27/2016 10:54 PM - Daniel Curtis

- Status changed from New to In Progress
- Start date changed from 02/27/2016 to 02/28/2016
- % Done changed from 0 to 30

#2 - 02/28/2016 01:17 PM - Daniel Curtis

- Description updated
- Status changed from In Progress to Resolved
- % Done changed from 30 to 100

#3 - 02/28/2016 01:19 PM - Daniel Curtis

- Description updated

#4 - 03/03/2016 12:39 PM - Daniel Curtis

- Description updated

#5 - 03/12/2016 02:05 PM - Daniel Curtis

- Status changed from Resolved to Closed