

Install Piwigo on FreeBSD

10/22/2016 07:54 PM - Daniel Curtis

Status:	Closed	Start date:	10/23/2016
Priority:	Normal	Due date:	
Assignee:	Daniel Curtis	% Done:	100%
Category:	Web Server	Estimated time:	1.00 hour
Target version:	FreeBSD 10	Spent time:	2.00 hours

Description

This is a guide on setting up Piwigo with Nginx on FreeBSD 10.

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 a couple dependencies:

```
pkg install git ImageMagick-nox11
```

- Create the piwigo user:

```
pw user add -n piwigo -s /sbin/nologin -c "Piwigo"
```

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:

```
load_module /usr/local/libexec/nginx/nginx_mail_module.so;
load_module /usr/local/libexec/nginx/nginx_stream_module.so;

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 mariadb100-server and mariadb100-client packages:

```
pkg install mariadb100-{server,client}
```

- Copy a base MySQL configuration to use:

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

- 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 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 **piwigodb** database and **piwigouser** user:

```
CREATE DATABASE piwigodb CHARACTER SET utf8;

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

GRANT ALL PRIVILEGES ON piwigodb.* TO 'piwigouser'@'localhost';
```

```
FLUSH PRIVILEGES;
```

```
quit
```

Install PHP

- Install PHP 5.6 and a few extensions:

```
pkg install php56 php56-{exif,filter,gd,hash,mbstring,mysqli,json,session,zip}
```

- Configure the default PHP settings

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

- Edit the php config file:

```
vi /usr/local/etc/php.ini
```

- And make sure the following values are set:

```
date.timezone = "America/Los_Angeles"  
max_execution_time = 200  
post_max_size = 100M  
upload_max_filesize = 100M  
memory_limit = 256M
```

- Create a directory for the php-fpm configs:

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

- Edit the php-fpm config file:

```
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 Piwigo

- Download Piwigo version 2.8 from GitHub:

```
cd /usr/local/www
git clone -b 2.8 https://github.com/Piwigo/Piwigo.git
```

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

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

- Add the following:

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

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

    # Set size for max uploaded content
    client_max_body_size 0;
    client_header_timeout 30m;
    client_body_timeout 30m;

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

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

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

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

- Create the piwigo php-fpm pool config file:

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

- And add the following:

```
[piwigo.example.com]
user = piwigo
group = www
listen = /var/run/piwigo.example.com-php-fpm.sock
listen.owner = piwigo
listen.group = www
pm = dynamic
pm.max_children = 5
pm.start_servers = 2
pm.min_spare_servers = 1
pm.max_spare_servers = 3
```

- Change the ownership of the piwigo directory:

```
chown -R piwigo:www /usr/local/www/Piwigo
```

- Restart nginx and start php-fpm:

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

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

Resources

- <http://piwigo.org/doc/doku.php>
- http://piwigo.org/doc/doku.php?id=user_documentation:learn:install:installation
- http://piwigo.org/basics/installation_manual

History

#1 - 10/22/2016 08:50 PM - Daniel Curtis

- Description updated
- Status changed from New to Resolved
- % Done changed from 0 to 100

#2 - 12/03/2016 12:49 PM - Daniel Curtis

- Status changed from Resolved to Closed