

# FreeBSD Administration - Support #747

## Install Redmine on FreeBSD

02/15/2016 01:42 PM - Daniel Curtis

<b>Status:</b>	Closed	<b>Start date:</b>	02/15/2016
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assignee:</b>	Daniel Curtis	<b>% Done:</b>	100%
<b>Category:</b>	Web Server	<b>Estimated time:</b>	2.00 hours
<b>Target version:</b>	FreeBSD 10	<b>Spent time:</b>	3.00 hours

### Description

This is a guide on installing Redmine with MariaDB and Nginx on FreeBSD 10.

## Prepare the Environment

- Make sure that pkg is set to use the latest packages. Create the pkg repo config file:

```
mkdir -p /usr/local/etc/pkg/repos
vi /usr/local/etc/pkg/repos/FreeBSD.conf
```

- And add the following:

```
FreeBSD: {
  url: "pkg+http://pkg.FreeBSD.org/${ABI}/latest",
  mirror_type: "srv",
  signature_type: "fingerprints",
  fingerprints: "/usr/share/keys/pkg",
  enabled: yes
}
```

- Make sure everything is up to date using the following command:

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

- Create a redmine user:

```
pw add user -n redmine -m -s /sbin/nologin -c "Redmine"
```

- Install a few dependencies:

```
pkg install portmaster gcc llvm36 cmake scons ImageMagick rubygem-mime-types1 rubygem-sass-rais
ls
```

## Install MariaDB server

- Start by installing the mariadb100-server and mariadb100-client packages:

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

- Copy a base MariaDB configuration to use:

```
cp /usr/local/share/mysql/my-small.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 MariaDB

```
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 MariaDB Databases and Users

- Login to MariaDB and create appropriate databases and users.

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

- and run the following SQL queries to create the **redminedb** database and **redmineuser** user:

```
CREATE DATABASE redminedb CHARACTER SET utf8;  
  
CREATE USER 'redmineuser'@'localhost' IDENTIFIED BY 'SuperSecretPassword';  
  
GRANT ALL PRIVILEGES ON redminedb.* TO 'redmineuser'@'localhost';  
  
FLUSH PRIVILEGES;  
  
quit
```

---

## Install Redmine

- Install redmine:

```
portmaster www/redmine
```

- **NOTE:** Make sure to enable **[X]PASSENGER** while configuring redmine

- Copy `config/database.yml.example` to `config/database.yml`:

```
cp /usr/local/www/redmine/config/database.yml.example /usr/local/www/redmine/config/database.y  
ml
```

- Edit the redmine database config:

```
vi /usr/local/www/redmine/config/database.yml
```

- And modify the production database settings:

```
production:
  adapter: mysql2
  database: redminedb
  host: localhost
  username: redmineuser
  password: "SuperSecretPassword"
  encoding: utf8
```

- Install gem dependencies:

```
cd /usr/local/www/redmine
bundle install --without development test postgres --path vendor/bundle
```

- Generate a secret token:

```
bundle exec rake generate_secret_token
```

- Create the database structure:

```
env RAILS_ENV=production bundle exec rake db:migrate
```

- Change the redmine site ownership:

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

---

## Install Nginx

- Install nginx with passenger support:

```
portmaster www/nginx
```

- **NOTE:** Make sure to enable **[X]PASSENGER** while configuring *nginx*

- Install Passenger

```
portmaster www/rubygem-passenger
```

- **NOTE:** Make sure to enable **[X]NGINX** while configuring *rubygem-passenger*
- **NOTE:** Enabling **[X]SYMLINK** makes upgrading *passenger* easier later on.

- Add the redmine user to the www group:

```
pw usermod redmine -G www
```

- 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 Phusion Passenger module globally
    passenger_root /usr/local/lib/ruby/gems/2.2/gems/passenger;
    passenger_ruby /usr/local/bin/ruby22;
    passenger_max_pool_size 15;
    passenger_pool_idle_time 300;

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

- Add a **redmine.example.com** server block:

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

- Add the following:

```
server {
    listen 80;
    server_name redmine.example.com;
    root /usr/local/www/redmine/public;
    access_log /var/log/redmine.example.com-access.log;
    error_log /var/log/redmine.example.com-error.log;

    passenger_enabled on;
    passenger_user redmine;
    passenger_group redmine;
}
```

- Restart nginx:

```
service nginx restart
```

- Open a web browser and go to <http://redmine.example.com>. The admin username is **admin** and password is **admin**.

## Resources

- <http://www.redmine.org/wiki/redmine/RedmineInstall>
- <http://www.redmine.org/wiki/redmine/RedmineUpgrade>

## History

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### #1 - 02/15/2016 01:44 PM - Daniel Curtis

- Description updated

### #2 - 02/15/2016 01:56 PM - Daniel Curtis

- Description updated

- Status changed from New to In Progress

- % Done changed from 0 to 50

### #3 - 02/15/2016 02:16 PM - Daniel Curtis

- Description updated

### #4 - 02/15/2016 05:54 PM - Daniel Curtis

- Description updated

- Status changed from In Progress to Resolved

- % Done changed from 50 to 100

### #5 - 02/23/2016 02:41 PM - Daniel Curtis

- Description updated

### #6 - 02/27/2016 09:39 PM - Daniel Curtis

- Description updated

### #7 - 02/28/2016 01:20 PM - Daniel Curtis

- Description updated

### #8 - 03/12/2016 02:02 PM - Daniel Curtis

- Status changed from Resolved to Closed

### #9 - 04/16/2016 09:22 AM - Daniel Curtis

- Description updated

### #10 - 04/16/2016 09:22 AM - Daniel Curtis

- Description updated

### #11 - 04/16/2016 10:02 AM - Daniel Curtis

- Description updated

### #12 - 04/16/2016 11:25 AM - Daniel Curtis

- Description updated

### #13 - 04/16/2016 02:02 PM - Daniel Curtis

- Description updated

**#14 - 04/16/2016 02:03 PM - Daniel Curtis**

- Target version changed from FreeBSD 9 to FreeBSD 10

**#15 - 04/17/2016 08:07 AM - Daniel Curtis**

- Description updated

**#16 - 04/17/2016 01:30 PM - Daniel Curtis**

- Description updated