
Redmine Installation Instructions

Last updated 01 November 2016

Jan Niggemann <jan.niggemann@hz6.de>

Copyright © 2013-2016 Jan Niggemann

Licence



This work is licensed under the CC Licence CC BY-NC-SA 3.0 DE¹
English translation: <http://creativecommons.org/licenses/by-nc-sa/3.0/>

Abstract

Instructions for installing Redmine (including Apache, MySQL, Passenger, Ruby) under Debian Wheezy

Table of Contents

1. Install ruby, rails, gems and passenger	2
1.1. Prepare Your System	2
1.2. Download, Build and Install Ruby	2
1.3. Check if Your Ruby Works	3
1.4. Make Ruby Support OpenSSL	3
1.5. Gem Command Installed?	3
1.6. Install Rails	3
1.7. Install Passenger (application server)	3
1.8. Configure Apache	4
1.9. Activate the Passenger Module	4
2. Install Redmine	4
2.1. Download Redmine	4
2.2. Further Prepare the System	4
2.3. Create Database	4
2.4. Configure the Database Connection	4
2.5. Generate a Session Store Secret	5
2.6. Prepare Database / Create Tables	5
2.7. Set Filesystem Permissions	5
2.8. Test if your Redmine Installation is OK	5
3. Configure Apache and Passenger	5
3.1. Configure apache (subURI deployment)	5



¹ <http://creativecommons.org/licenses/by-nc-sa/3.0/de/deed.de>

Preface

After reading this guide you should have a working redmine instance. If this is not the case or if a step fails, please post details on the Help forum² and refer to this instruction and the number of the section. Make sure to include the output of `gem env` and / or `RAILS_ENV=production /opt/redmine/script/about`.

If this guide has issues, please contact me via email.

I maintain this manual in my free time and would be glad to receive something from

my ³ or donations via ⁴.

About this guide

This is a step-by-step guide to install redmine on "Debian stable" (called Wheezy at the moment of writing). It is written for people who are familiar with Debian, the shell, MySQL, Apache and Linux in general. To keep this guide short, it does not explain every step in detail. The filenames and paths in this document are subject to frequent change. I'll do my best to keep them up-to-date, but please check anyway. Please note: I'm assuming that you know how to use the tools at hand. If that's not the case (eg. you don't know how to create a new database or you don't know how to restart apache) please use the search engine of your choice and come back afterwards.

Conventions used in this document

Text type	Meaning
monospace font	is used to indicate user input or system output as well as configuration files
↵	is used to show that a line is not terminated but continues below

1. Install ruby, rails, gems and passenger

1.1. Prepare Your System

```
apt-get install gcc build-essential zlib1g zlib1g-dev zlibc ↵
libssl-dev libyaml-dev libcurl4-openssl-dev ↵
apache2-mpm-prefork apache2-dev ↵
libapr1-dev libxslt-dev checkinstall ENTER
apt-get build-dep ruby ENTER
```

1.2. Download, Build and Install Ruby

Please press **ENTER** at the end of each line

```
cd ~
wget -c ftp://ftp.ruby-lang.org/pub/ruby/2.3/ruby-2.3.1.tar.gz
tar xvfz ruby-2.3.1.tar.gz
cd ruby-2.3.1
```

² <http://www.redmine.org/projects/redmine/boards/2>

³ <http://www.amazon.de/registry/wishlist/GAOFFPW3WLH2>

⁴ https://www.paypal.com/cgi-bin/webscr?cmd=_s-xclick&hosted_button_id=GLW5CMTZFBP8A

```
./configure --enable-pthread --prefix=/usr/local
make
su
checkinstall --type=debian --install=yes --fstrans=no --pakdir='~'
```

1.3. Check if Your Ruby Works

```
ruby -v 
```

Expected output looks like this:

```
ruby 2.3.1pXXX (2016-04-26 revision XXXXX) [x86_64-linux]
```

1.4. Make Ruby Support OpenSSL

Please press at the end of each line

```
cd ext/openssl/
ruby extconf.rb
make
su
checkinstall --type=debian --install=yes --fstrans=no --pakdir='~'
```

1.5. Gem Command Installed?

Ruby 1.9 comes with RubyGems by default, so by now the command "gem" should be installed. If correctly installed, the following command will output a version number like 1.8.2x:

```
gem -v 
```

We can now install rdoc:

```
gem install rdoc 
```

1.6. Install Rails

Check requirements here RedmineInstall⁵ and force the version number (else the latest version will be installed):

```
gem install rails -v=4.2.7.1 --no-ri --no-rdoc 
```

Note

You may be getting the error message *"no such file to load --zlib (LoadError)"*. In this case you need to install zlib first:

```
cd ruby-2.3.1/ext/zlib/
ruby extconf.rb
make
make install
```

1.7. Install Passenger (application server)

```
gem install passenger 
passenger-install-apache2-module 
```

⁵ <http://www.redmine.org/projects/redmine/wiki/RedmineInstall>

1.8. Configure Apache

Put this in `/etc/apache/mods-available/passenger.load` (remember to adjust the paths if necessary).
The following is a single line!

```
LoadModule passenger_module ↵  
/usr/local/lib/ruby/gems/1.9.1/gems/passenger-4.0.46/ext/ ↵  
apache2/mod_passenger.so
```

And put this in `/etc/apache/mods-available/passenger.conf` (remember to adjust the paths if necessary).

```
PassengerRoot /usr/local/lib/ruby/gems/1.9.1/gems/passenger-4.0.46  
PassengerRuby /usr/local/bin/ruby  
PassengerDefaultUser www-data
```

1.9. Activate the Passenger Module

```
a2enmod passenger 
```

2. Install Redmine

2.1. Download Redmine

Get latest zip from redmine.org⁶ and unpack to `/opt/redmine`

2.2. Further Prepare the System

Note: Installing `libmagickwand-dev` installs a lot of packages (depends / recommends)

Note: If you encounter an error on bundle install, then you may try to purge, then install *-dev packages

Please press at the end of each line

```
gem install bundler mysql2  
apt-get install libmagick9-dev libmysqlclient-dev  
cd /opt/redmine  
bundle install --without postgresql
```

2.3. Create Database

A prerequisite for this step is the installation of MySQL. If you don't have MySQL installed, please do it now using your distributions' package manager. These commands are to be issued in your MySQL client, not at your prompt! If you don't know how to start your MySQL client, search the internet and make yourself familiar with basic tasks (authenticating, creating users and databases,...)

Please press at the end of each line

```
create database redmine character set utf8;  
create user 'redmine'@'localhost' identified by 'XXX';  
grant all privileges on redmine.* to 'redmine'@'localhost';
```

2.4. Configure the Database Connection

Put this in `/opt/redmine/config/database.yml`

```
production:
```

⁶ <http://www.redmine.org/projects/redmine/wiki/Download>

```
adapter: mysql2
database: redmine
host: localhost
username: redmine
password: XXX
```

2.5. Generate a Session Store Secret

```
rake generate_secret_token 
```

2.6. Prepare Database / Create Tables

```
RAILS_ENV=production rake db:migrate 
```

2.7. Set Filesystem Permissions

Please press at the end of each line

```
cd /opt/redmine
mkdir tmp tmp/pdf public/plugin_assets
chown -R www-data:www-data files log tmp public/plugin_assets
chmod -R 755 files log tmp public/plugin_assets
```

2.8. Test if your Redmine Installation is OK

```
bundle exec rails server webrick -e production 
```

Now go to <http://localhost:3000> and see redmine in action.

3. Configure Apache and Passenger

In this guide, we deploy to a sub-URI. Read other guides if you want a name-based virtual host configuration.

3.1. Configure apache (subURI deployment)

```
ln -s /opt/redmine/public /var/www/redmine 
```

Put this in `/etc/apache2/sites-available/redmine` Note: The option *RackBaseURI* is for rails 3, in rails 2 it was called *RailsBaseURI*. It is in no case called *RakeBaseURI*.

```
<Location /redmine>
  RailsEnv production
  RackBaseURI /redmine
  Options -MultiViews
</Location>
```

Now activate the new site:

```
a2ensite redmine 
```

Restart apache, test if <http://yourhost.com/redmine> is working, rejoice if it is :-)

If you see something unexpected, please post details on the Help forum⁷ and refer to this instruction and the number of the section. Make sure to include the output of `gem env` and `/ or RAILS_ENV=production /opt/redmine/script/about`.

⁷ <http://www.redmine.org/projects/redmine/boards/2>