

Fredistrano v0.3 Documentation

Frédéric BOLLON

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Table des matières

1	Introduction	2
2	Requirements	3
3	Installation	4
4	Usage	6
4.1	Setting up your project	6
4.2	Deployment steps	8
4.2.1	Adding a new project	8
4.2.2	Project deployment	8
5	Related links	10

Chapitre 1

Introduction

Fredistrano is a deployment tool for PHP web applications. It automates the export of your sources from a subversion repository and synchronizes them with the content of a target directory. Several manual tasks are also handled directly by the application during the deployment : renaming of configuration files, modifying permissions... Fredistrano is inspired from the smart Capistrano project.

From a technical perspective, this application has been written in PHP with the cakePHP framework. Fredistrano both supports Windows/Linux environment. Concerning Windows, Fredistrano requires the installation of Cygwin in order to use the rsync command.

Special thanks to Aurélien Millet and euphrate_ylb for their help in this project.

Chapitre 2

Requirements

Fredistrano must be installed on a Apache Web server hosted **indifferently** under Linux or Windows.

Common to all OS

- A Php project "versioned" with Subversion
- A Php web hosting with the safe_mode set to Off and mod_rewrite activated

If mod_rewrite is not working you will need to remove the comment from app/config/core.php

a. Around line 40 : define ('BASE_URL', env('SCRIPT_NAME'));

b. Then access using `http://www.example.com/my_directory/index.php/pages` to verify installation is working

Windows only

- For deployment on windows servers, you need to install cygwin with packages rsync, perl and subversion.

Chapitre 3

Installation

- Download the latest version of Fredistrano on
<http://code.google.com/p/fredistrano/downloads/list>
- Untar the archive at the root of your web server or in a directory of your choice
`tar -xzf fredistrano_x.x.tar.gz`
- Give writable permission to temporary directories (only on linux servers).

```
chmod -R 777 app/tmp/ files/
```

- Create the database with the sql script in
`/app/config/sql/fredistrano.sql`
- Create files `app/config/config.php` et `app/config/database.php` with the help of `config.prn.php` and `database.prn.php`

- Configure app/config/database.php following your database

example :

```
var $default ← array (
    'driver' ↔ 'mysql',
    'connect' ↔ 'mysql_connect',
    'host' ↔ 'localhost',
    'login' ↔ 'usermysql',
    'password' ↔ 'password',
    'database' ↔ 'Fredistrano',
    'prefix' ↔ ''
);
```

- A user "admin" with password "admin" is created by the sql script, don't forget to change password in Administration/users. If you create a new user, you need to affect it the group "admin". **Do not delete the user "admin" before creating a new user for the group "admin".**

Chapitre 4

Usage

4.1 Setting up your project

Before being able to deploy your project with fredistrano, you must set it up according to the following recommendations :

- Your project must be versionned with subversion.
- If the content of some files differs between the deveploment environment and the production one, these files shouldn't be added to subversion but only copies with an extension like '.dev.xxx' et '.prd.xxx' :
For example, if the application requires a database.php file where connection parameters are defined, you won't add directly this file to subversion. Instead, you will add two other versions, one for each environment, nammed database.dev.php and database.prd.php.
During the deployment, whatever the extension is, all 'prd.xxx' files will be deployed (not 'dev.xxx' ones) and renamed in '.xxx'.
- A 'deploy.php' file must be created at the application root. This files contains application specific deployment parameters such as a list of files and folders that shouldn't be synchronized, a list of writable directories... Notice that this file won't be deployed in your production environment. Here is an example of deploy.php :

```
class DEPLOY_CONFIG {  
  
    var $exclude = array (  
        '/app/tmp/cache/models/*',  
        '/app/tmp/cache/persistent/*',  
    );  
}
```

```
        '/app/tmp/cache/views/*',  
        '/app/tmp/logs/*',  
        '/app/tmp/sessions/*',  
        '/app/tmp/tests/*',  
        '/app/webroot/files/*',  
        '/app/config/database.php',  
        '/app/config/config.php',  
        '.settings'  
    );  
  
    var $writable = array (  
        '/app/tmp',  
        '/app/webroot/files'  
    );  
}
```


4.2 Deployment steps

4.2.1 Adding a new project

To deploy a PHP web application with Fredistrano, the first step is to create a new project.

1. Click on the "Projects" toggle (Top of your screen)
2. Click on the "Add a new project" link
3. Fill out the form as follow :
 - Field : **"Project name"** : Is used to identify the project. It will also be used as a directory name for temporary copy during the deployment. Do not use special characters.
 - Field : **"SVN Url"** : Url of the SVN repository of the project that should be deployed (eg. : "http://svn.mondomain.com/monProjet/trunk").
 - Field : **"Application Url"** : Won't be used by Fredistrano. Juste a simple reminder.
 - Field : **"Absolute path"** : Absolute path of the target folder where the application should be deployed
Example for a Windows server (located on the server) : D:\www\html\myProject
Example on a Linux server : /var/www/html/monProjet or /home-/monUser/monDomain.com.

4.2.2 Project deployment

1. Display the details of the project that should be deployed.
2. Click on "Deploy project".
3. Specify the revision number. If empty, Fredistrano will checkout the latest revision of the repository.
4. In the case of a private Subversion project protected by login/password, you may specify your credentials at this step. If all your projects are using the same credentials, you may specify them in the file *app/config/config.php*.
5. Click on "Step 1 SVN export". An svn export is executed and the result is displayed in the console located at the bottom (*output console*) "Fredistrano/files/tmp/nomduprojet/tempDir".

6. For the next step, if "simulate" is checked, the rsync command will only be simulated and its result may be seen in the output console.
7. Click on "Step 2 synchronize".
8. A backup is performed in "Fredistrano/files/backup/projectName". The rsync command is executed between "Fredistrano/files/tmp/projectName/tempDir" and "projectName".
9. Finally, as the last step, three options may be overridden : 1. renaming of '.prd.' files, 2. force files and folders permissions, 3. set write privileges on special folders . The initial values depend on the content of your config.php file. les trois options sont désactivables : renommage des fichiers '.prd.'.
10. Click on "Step 3 finalize" and you're done !

Chapitre 5

Related links

You will find in the following

- An example of web host that satisfy the requirements of Fredistrano
<http://www.fbollon.net/node/12>
- A quick explanation on how to use Subversion
<http://www.fbollon.net/node/65>
- The official support forum of Fredistrano
<http://www.fbollon.net/forum/26>