# sdocs

Release 0.1.alpha

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sdocs is an akronym for small/simple dokumentation

Contents:

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# **ONE**

# **OVERVIEW**

### Warning:

- # A collection of Howto's, Guides, Snippets collected from the web
- # Only for private use and there ist no warranty for correct information
- # You use it at your own risk, and all information is copyrighted by the owner
- # Most of this Source is written and collected by Jeffrey Scherling  $^a$

#### See also:

Google, for the source of these informations.

**Note:** This document was generated on 2014-12-02 at 23:54.

<sup>&</sup>lt;sup>a</sup> Have Fun!

### **TWO**

### **SDOCS**

# this is the index of sdocs

# 2.1 Sphinx

# a quick start guide

#### I Prerequisites

- 1. python
- 2. sphinx
- 3. webbrowser or pdfviewer

### II Build the documentation

- 1. enter sphinx-quickstart # create the root directory of documentation
- 2. edit conf.py # set the output to your needs
- 3. create your docu name.rst
- 4. add name.rst to index.rst
- 5. make html, latexpdf or linkcheck

#### III Look at the Documentation

- 1. open index.html with your webbrowser
- 2. open projectname.pdf with your pdfviewer

### IV Markup

- markup http://sphinx-doc.org/rest.html
- links http://sphinx-doc.org/markup/inline.html#ref-role
- markup code http://sphinx-doc.org/markup/code.html
- guide http://docs.python-guide.org/en/latest/writing/documentation/

# 2.2 Webserver

# webserver and their configuration

### **2.2.1 Nginx**

- · nginx configuration
  - config files
  - websites configs

# this is the main nginx configuration file nginx.conf

```
amorsql amorsql; # user group of processes
worker_processes 2;
events {
       worker_connections 1024;
http {
       include
                                      mime.types;
       default_type
                                   application/octet-stream;
       gzip
                                   on;
       gzip_min_length
                                      5000;
       gzip_buffers
                                    4 8k;
       gzip_types
                                text/plain text/css application/x-javascript text/xml application/:
       gzip_proxied
                                  any;
       gzip_comp_level
                                      2;
       ignore_invalid_headers
                                     on;
       include
                                      sites-enabled/*;
       # test it
       sendfile
                               on;
```

# 2.3 Ftpserver

# Ftpserver and their configuration

### 2.3.1 Vsftpd

# configuration of vsftpd

http://www.basicconfig.com/linuxnetwork/ftp\_server#check-vsftpd http://wiki.ubuntuusers.de/vsftpd

```
# Example config file /etc/vsftpd.conf
#
#
The default compiled in settings are fairly paranoid. This sample file
# loosens things up a bit, to make the ftp daemon more usable.
# Please see vsftpd.conf.5 for all compiled in defaults.
#
# READ THIS: This example file is NOT an exhaustive list of vsftpd options.
# Please read the vsftpd.conf.5 manual page to get a full idea of vsftpd's
# capabilities.
#
# Allow anonymous FTP? (Beware - allowed by default if you comment this out).
anonymous_enable=NO
#
```

```
# Uncomment this to allow local users to log in.
local_enable=YES
# Uncomment this to enable any form of FTP write command.
write_enable=YES
# Default umask for local users is 077. You may wish to change this to 022,
\# if your users expect that (022 is used by most other ftpd's)
# default
local_umask=022
# Uncomment this to allow the anonymous FTP user to upload files. This only has an effect if the above
#anon_upload_enable=YES
# Uncomment this if you want the anonymous FTP user to be able to create
# new directories.
#anon_mkdir_write_enable=YES
# Activate directory messages - messages given to remote users when they
# go into a certain directory.
dirmessage_enable=YES
# Activate logging of uploads/downloads.
xferlog_enable=YES
# Make sure PORT transfer connections originate from port 20 (ftp-data).
connect_from_port_20=YES
# If you want, you can arrange for uploaded anonymous files to be owned by a different user. Note! Us
# recommended!
#chown_uploads=YES
#chown_username=whoever
# You may override where the log file goes if you like. The default is shown
# below.
xferlog_file=/var/log/vsftpd.log
# If you want, you can have your log file in standard ftpd xferlog format. Note that the default log
xferlog_std_format=YES
# You may change the default value for timing out an idle session.
#idle_session_timeout=600
# You may change the default value for timing out a data connection.
#data_connection_timeout=120
# It is recommended that you define on your system a unique user which the ftp server can use as a to
nopriv_user=ftpsecure
# Enable this and the server will recognise asynchronous ABOR requests. Not recommended for security
# however, may confuse older FTP clients.
#async_abor_enable=YES
# By default the server will pretend to allow ASCII mode but in fact ignore the request. Turn on the
# mangling on files when in ASCII mode.
# Beware that on some FTP servers, ASCII support allows a denial of service
```

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```
# attack (DoS) via the command "SIZE /big/file" in ASCII mode. vsftpd
# predicted this attack and has always been safe, reporting the size of the
# raw file.
# ASCII mangling is a horrible feature of the protocol.
#ascii_upload_enable=YES
#ascii_download_enable=YES
# You may fully customise the login banner string:
#ftpd_banner="___
                                                  __Welcome to my ftp Site!____
# customize your login
banner_file=/etc/vsftpd.banner_file
# You may specify a file of disallowed anonymous e-mail addresses. Apparently
# useful for combatting certain DoS attacks.
#deny_email_enable=YES
# (default follows)
#banned_email_file=/etc/vsftpd.banned_emails
# You may specify an explicit list of local users to chroot() to their home
# directory. If chroot_local_user is YES, then this list becomes a list of
# users to NOT chroot().
# (Warning! chroot'ing can be very dangerous. If using chroot, make sure that
# the user does not have write access to the top level directory within the
# chroot)
# dangerous don't use it
chroot_local_user=NO
chroot_list_enable=YES
passwd_chroot_enable=YES
chroot_list_file=/etc/vsftpd.chroot_list
# You may activate the "-R" option to the builtin ls. This is disabled by
# default to avoid remote users being able to cause excessive I/O on large
# sites. However, some broken FTP clients such as "ncftp" and "mirror" assume
\# the presence of the "-R" option, so there is a strong case for enabling it.
ls_recurse_enable=YES
# When "listen" directive is enabled, vsftpd runs in standalone mode (rather
# than from inetd) and listens on IPv4 sockets. To use vsftpd in standalone
# mode rather than with inetd, change the line below to 'listen=YES'
# This directive cannot be used in conjunction with the listen_ipv6 directive.
listen=NO
# This directive enables listening on IPv6 sockets. To listen on IPv4 and IPv6
# sockets, you must run two copies of vsftpd with two configuration files.
# Make sure, that one of the listen options is commented !!
#listen_ipv6=YES
# adds by jeff
# allow write with chroot
allow_writeable_chroot=YES
# access to only this users
userlist_deny=NO
userlist_enable=YES
userlist_file=/etc/vsftpd.user_list
```

```
# ssl
#ssl_enable=NO
#ssl_sslv2=YES
#create ssl - Zertifikat for ssl using
#openssl req -x509 -nodes -days 365 -newkey rsa:1024 -keyout /etc/ssl/private/vsftpd.pem -out /etc/s
# guests remapping all non annonymus to this login
#guest_enable=YES
#guest_username=ftpuser
max_clients=3
max_per_ip=2
tilde_user_enable=YES
# hide and deny files and directories
hide_file={/,/media,/gamma_sftp}
deny_file={/,/media,/gamma_sftp}
# ftp commands to deny
# deny change to the parent of the current working directory.
#cmds_denied=XCUP
# set the default mmask
#file_open_mode=0777
# restart the process
```

root@gamma:~# /etc/rc.d/rc.inetd restart Starting Internet super-server daemon: /usr/sbin/inetd # customize the login with vsftpd.banner\_file

# allow user who are permitted to login with vsftpd.user\_list

User 1 User 2 User 3

# allow user who are login with chroot in a jail with vsftpd.chroot\_list

User 1 User 2 User 3

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### 2.4 Databases

# configuration of different databeses

#### 2.4.1 MariaDB

# Howto Setup MariaDB

#### I Prerequisites

- 1. mariadb-5.5.40-x86 64-2.txz
- 2. privileged user only for sql-data, mostly mysql

#### II Installation for Slackware

- 1. use slackpkg
- 2. use sbopkg
- 3. use SlackBuild scripts

#### III Configuration

Howto: http://docs.slackware.com/howtos:databases:install\_mariadb\_on\_slackware

- 1. mysql\_install\_db -user=mysql
- 2. chown -R mysql.mysql /var/lib/mysql
- 3. chown 755 /etc/rc.d/rc.mysqld
- 4. /etc/rc.d/rc.mysqld start
- 5. mysqladmin -u root password 'NEW\_PASSWORD'
- 6. use phpmyadmin to manage databases

```
root@gamma:~# mysql_install_db --user=mysql
Installing MariaDB/MySQL system tables in '/var/lib/mysql' ...
Filling help tables...
To start mysqld at boot time you have to copy
support-files/mysql.server to the right place for your system
PLEASE REMEMBER TO SET A PASSWORD FOR THE MariaDB root USER !
To do so, start the server, then issue the following commands:
'/usr/bin/mysqladmin' -u root password 'new-password'
'/usr/bin/mysqladmin' -u root -h gamma password 'new-password'
Alternatively you can run:
'/usr/bin/mysql_secure_installation'
which will also give you the option of removing the test
databases and anonymous user created by default. This is
strongly recommended for production servers.
See the MariaDB Knowledgebase at http://mariadb.com/kb or the
MySQL manual for more instructions.
```

```
You can start the MariaDB daemon with:
cd '/usr'; /usr/bin/mysqld_safe --datadir='/var/lib/mysql'

You can test the MariaDB daemon with mysql-test-run.pl
cd '/usr/mysql-test'; perl mysql-test-run.pl

Please report any problems at http://mariadb.org/jira

The latest information about MariaDB is available at http://mariadb.org/.
You can find additional information about the MySQL part at:
http://dev.mysql.com

Support MariaDB development by buying support/new features from
SkySQL Ab. You can contact us about this at sales@skysql.com.
Alternatively consider joining our community based development effort:
http://mariadb.com/kb/en/contributing-to-the-mariadb-project/

root@gamma:~#
```

# 2.4.2 PostgreSQL

#### # Howto Setup Postgresql

#### I Prerequisites

- 1. postgresql-5.1.tar.gz
- 2. privileged user only for sql-data

#### II Installation for Slackware

- 1. use slackpkg
- 2. use sbopkg
- 3. use SlackBuild scripts

Enter new superuser password:

#### **III Configuration**

1. create database

```
root@gamma:~# su amorsql -c "initdb -D /var/lib/pgsql/9.3/data --locale=en_US.UTF-8 -A md5 -W"

could not change directory to "/root": Permission denied

The files belonging to this database system will be owned by user "amorsql".

This user must also own the server process.

The database cluster will be initialized with locale "en_US.UTF-8".

The default database encoding has accordingly been set to "UTF8".

The default text search configuration will be set to "english".

Data page checksums are disabled.

fixing permissions on existing directory /var/lib/pgsql/9.3/data ... ok

creating subdirectories ... ok

selecting default max_connections ... 100

selecting default shared_buffers ... 128MB

creating configuration files ... ok

creating templatel database in /var/lib/pgsql/9.3/data/base/1 ... ok

initializing pg_authid ... ok
```

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```
Enter it again:
setting password ... ok
initializing dependencies ... ok
creating system views ... ok
loading system objects' descriptions ... ok
creating collations ... ok
creating conversions ... ok
creating dictionaries ... ok
setting privileges on built-in objects ... ok
creating information schema \dots ok
loading PL/pgSQL server-side language ... ok
vacuuming database template1 ... ok
copying template1 to template0 ... ok
copying template1 to postgres ... ok
syncing data to disk \dots ok
Success. You can now start the database server using:
postgres -D /var/lib/pgsql/9.3/data
pg_ctl -D /var/lib/pgsql/9.3/data -l logfile start
root@gamma:~#
```

- 2. start the database
- 3. change user and group to what you set, edit rc.postgresql

```
root@gamma:~# /etc/rc.d/rc.postgresql start
Starting PostgreSQL
waiting for server to start.... done
server started
root@gamma:~#
```

4. manage databases with phpPgAdmin

### 2.4.3 PHPmyadmin

# Howto Setup PHPmyadmin

I Prerequisites

1. phpmyadmin-4.2.11-noarch-1js.txz

II Installation for Slackware

- 1. use slackpkg
- 2. use sbopkg
- 3. use SlackBuild scripts

III Configuration

Setup: http://wiki.phpmyadmin.net/pma/Setup Quick-Install: http://wiki.phpmyadmin.net/pma/Quick\_Install

- 1. cd phpMyAdmin
- 2. mkdir config # create directory for saving
- 3. chmod o+rw config # give it world writable permissions

- 4. cp config.inc.php config/# copy current configuration for editing
- 5. chmod o+w config/config.inc.php # give it world writable permissions
- 6. open http://phpmyadmin/setup/ # see nginx config
- 7. mv config/config.inc.php . # move file to current directory
- 8. chmod o-rw config.inc.php # remove world read and write permissions
- 9. open http://phpmyadmin/
- 10. login with root login and password
- 11. start adminstration

### 2.4.4 phpPgAdmin

# Howto Setup phpPgAdmin

I Prerequisites

1. phpPgAdmin-5.1-noarch-1js

II Installation for Slackware

- 1. use slackpkg
- 2. use sbopkg
- 3. use SlackBuild scripts

**III Configuration** 

Setup: http://phppgadmin.sourceforge.net/doku.php

# 2.5 Drupal

setup drupal: https://www.drupal.org/start drupal with nginx: http://wiki.nginx.org/Drupal

# 2.6 Django

# Howto Setup a Nginx, Django, Postgresql, Gunicorn deployment

I Prerequisites

- 1. server: nginx
- 2. framework: django
- 3. databank: postgresql (mariadb)
- 4. python-translator: gunicorn (uwsgi)

Addons a. virtual environments: virtualenv b. documentation: sphinx c. maybe pip for easy installation

II Installation for Slackware

- 1. use slackpkg
- 2. use sbopkg

2.5. Drupal 13

3. use SlackBuild scripts

**III Configuration** 

### 2.6.1 Django-Setup

# Howto Setup Django

I Prerequisites

- 1. webserver environment with php and database
- 2. framework: django
- 3. python-translator: gunicorn (uwsgi)

Addons a. virtual environments: virtualenv

II Installation for Slackware

- 1. use slackpkg
- 2. use sbopkg
- 3. use SlackBuild scripts

**III Configuration** 

#### 2.6.2 Gunicorn

I Build your First App with Gunicorn

```
$ sudo pip install virtualenv
 $ mkdir ~/environments/
 $ virtualenv ~/environments/tutorial/
 $ cd ~/environments/tutorial/
 $ ls
 bin include lib
 $ source bin/activate
  (tutorial) $ pip install gunicorn
  (tutorial) $ mkdir myapp
  (tutorial) $ cd myapp/
  (tutorial) $ vi myapp.py
  (tutorial) $ cat myapp.py
 def app(environ, start_response):
      data = "Hello, World!\n"
      start_response("200 OK", [
      ("Content-Type", "text/plain"),
      ("Content-Length", str(len(data)))
      ])
      return iter([data])
  (tutorial) $ ../bin/gunicorn -w 4 myapp:app
2010-06-05 23:27:07 [16800] [INFO] Arbiter booted
2010-06-05 23:27:07 [16800] [INFO] Listening at: http://127.0.0.1:8000
2010-06-05 23:27:07 [16801] [INFO] Worker spawned (pid: 16801)
2010-06-05 23:27:07 [16802] [INFO] Worker spawned (pid: 16802)
```

```
2010-06-05 23:27:07 [16803] [INFO] Worker spawned (pid: 16803) 2010-06-05 23:27:07 [16804] [INFO] Worker spawned (pid: 16804)
```

### 2.7 Github

# Howto Setup Github

I Prerequisites

- 1. git
- 2. ssh
- 3. login on github

II Installation for Slackware

- 1. use slackpkg
- 2. use sbopkg
- 3. use SlackBuild scripts

#### **III Configuration**

1. quick setup

create ssh key add ssh key create a repo in github push your changes to your repo

2. setup github https://help.github.com/articles/set-up-git/

see too man git or man gittutorial:

```
git config --global user.name "YOUR NAME"
git config --global user.email "YOUR EMAIL ADDRESS"
```

3. initialisize repo and push it to remote repo with same name

cd repo touch README.md git init git add README.md git commit -m "first commit" git remote add origin git@github.com:githubuser/repo.git git push -u origin master

IV How to use it

1. simple howtos

http://githowto.com/setup http://gitreal.codeschool.com/levels/1

V Other Dokumentation

1. create a repo

https://help.github.com/articles/create-a-repo/ https://help.github.com/articles/fork-a-repo/ https://help.github.com/articles/be-social/

2. sync a fork

https://help.github.com/articles/syncing-a-fork/ https://help.github.com/articles/pushing-to-a-remote/

2.7. Github 15

3. git docs

http://git-scm.com/

VI Use the Repo

1. e.g. fork sphinx does on readthedoes

https://readthedocs.org/

# 2.8 Backup

# cool backup software

http://www.cyberciti.biz/open-source/awesome-backup-software-for-linux-unix-osx-windows-systems/

### 2.8.1 Rsnapshot

http://www.rsnapshot.org/

## 2.9 Readthedocs

# a cool site for documentations

https://readthedocs.org/

# **THREE**

# **TODO**

- setup git (in progress)
- setup readthedocs (in progress)
- setup ftpserver
- send vitali and achim link to photos
- setup phpPgAmdin
- setup postgresql
- setup gunicorn
- setup django
- setup mini server
- setup mutt and sendmail
- read root mail from rsnapshot

18 Chapter 3. ToDo

# **FOUR**

# **DONE**

• setup rsnapshot (finished)

20 Chapter 4. Done

# **FIVE**

# **INDICES AND TABLES**

- genindex
- modindex
- search