

Installing Typo3 on Mandrake Linux

Extension Key: **av_mandrakelinux_install**

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- a GNU/GPL CMS/Framework available from www.typo3.com

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Introduction

What does it do?

- This manual provides you with all the information needed to setup a Typo3 Server on Mandrake Linux.

Screenshots

- Screenshots will be shown in the manual.

Install Mandrake Linux 9.1

Boot setting of your Computer

- Please insert the Linux Mandrake 9.1 installation CD-ROM number 1 into your first drive.

- While booting make sure that your server can boot from CD-ROM, otherwise you have to enter the BIOS and change the the first boot-device and boot again.
- If there has been another operation system installed before on your server, the setup will ask you to choose on of the available options:
 - Upgrade 9.1 (Bamboo)
 - Upgrade 8.2 (Bluebird)
 - Install
- Please make sure that you choose the "Install" option, otherwise this document could be different from what will appear during the installation. The "Install" option will overwrite any other/old installation.

Select the language

- Please select you own language if not selected by default, then click the "Next" button.

Licence acception

- In order to install Mandrake Linux, you have to accept the terms and conditions Mandrake comes with. Please choose "accept" and then click on the "Next" button.

Choose your mouse type

- This screen will ask you to choose your mouse connected to the computer. Normally there is one selected by default.
- If you have connected a serial mouse, the setup is asking which port the mouse is connected to. The default port is ttyS0 / COM1.
- If you have finished, press the "Next" button.

Security level

- Choosing the security level means influencing the whole security of your server. I suggest to choose "Higher" and evaluate that later, if not needed. Be aware of hacking risks, especially when your computer is permanently connected to the internet and has his own IP address.
- The security issues of Mandrake are not yet discussed in that manual. Please make sure you go to the mandrake website and inform yourself, otherwise use any linux mailing lists and ask other people.

Harddrive partitioning

- The setup will ask you if you want to use the whole disk for installation. Please answer with "yes".
- The partitioning can be done automatically. If you are familiar with partitioning harddrives, choose "individual partitioning".
- I suggest to use the following guidelines:

Partition:	Disc Space:	Partition Type:
/boot	100MB	Ext3
/root	Approx. 9-10%	Ext3
SWAP Space	500MB – 1GB	SWAP
/usr	Approx. 20%	Ext3
/var	Approx. 50%	Ext3
/home	Approx. 20%	Ext3

- The directories /var and /home may occupy the most disc space, depending on what you use in your Typo3 website (e.g. many download files).

Package selection

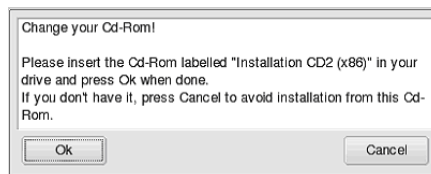
- The selection of packages depend on how you use the server (e.g. If you want to setup GUI like KDE or Gnom).
- I normally just select:
 - Internet
 - Network
 - Shell-Tools
 - Development
 - Documentation
- I do not install the server packages like webserver, mail, database etc. by default. I prefer to do it later because I want to know what is installed.
- Remember that this manual shows you how to install your webserver and other packages. If you install additional tools over the setup, be aware of other steps you have to take during the installation of the typo3 server.

Postfix and Webmin

- The setup will ask you if you wish to install postfix and webmin. I do not install it, because my server is running in an intranet. Please choose whatever you need.

Installation progress

- Right now the choosen packages will be installed by the setup routine. The setup will show you how much time it needs to finish.
- The setup will ask you to change the installation discs as needed. Make sure you have them available.



System configuration

- After installation of the packages, the system will be configured.
- No user interaction is needed, so just wait till the next screen turns up which asks you for entering the root password.

Create user accounts

- Consider to choose a password you can remember, but nobody can imagine as your choosen password.
- The root password has to be of a certain length.
- Try to use small and capital letters as well as numbers.

- The next step will be to create other users who can access the server.

- The users can be provided with certain rights/permission. Try to be conservative. Never give permission to somebody who does not need it.

Operationsystem starter installation

- The setup will install the operationsystem starter LILO.
- Please choose the master boot record (MBR) as place to install to on the harddrive.

Summary

- You get the chance to configure your system right now. Do not leave that out! Do it now. It is a lot easier right now than later. Go through the list and click on configure buttons.

Update

- If you have your server already connected to a network and configured your network card in the summary section, you can download updates now.
- Updates contain solved problems, consider security issues etc. It is recommended to install the updates as soon as possible and track also in future use of the server.

Reboot

- The setup is done :-) Your server can be rebooted right now. Click on the reboot button.

Additional Information

- If the server security level is set to "Higher", you will not be able to login directly as "root".
- First login as normal user, then type in:

```
# su -
```

- Right now you can type in the "root" password and you will be logged in as root.

URPMI Sources

Introduction

- Mandrake offers the possibility to install packages from internet sources.
- You do not have to have installation discs anymore.
- Therefore it makes further installation of packages very easy.
- The internet sources are also the most recent releases and it is more software available as on CD-ROM.

Installation

- To install packages over internet sources you have to tell the Mandrake Package Manager (URPMI) the existence of the sources.
- The registration of sources can be done with a script which you can dynamically create over the following website, called Easy URPMI: <http://plf.zarb.org/~nanardon/>
 1. Select your system
 2. Select the mirrors you want to include (please select at least "main" and "contrib")
 3. Copy the given code into a file and add the following line at the top: "#!/bin/sh" as well as "urpmi.removemedias -a".
- Make sure your internet connection is up and running.

- You have to make the file (you pasted the copied code into) executable (chmod 777 {file}).
- Then start the file just with typing in the name in the shell and click return/enter.

```
#!/bin/sh
urpmi.removemedias -a
urpmi.addmedia plf ftp://knight.zarb.org/pub/plf/mandrake/9.1 with hdlist.cz
urpmi.addmedia main ftp://public.ftp.planetmirror.com/pub/mandrake/9.1/i586/Mandrake/RPMS with ../base/hdlist.cz
urpmi.addmedia contrib ftp://sunsite.informatik.rwth-aachen.de/pub/Linux/mandrake/9.1/contrib/RPMS with
                                                                    ../../i586/Mandrake/base/hdlist2.cz
urpmi.addmedia jpackage.free ftp://ftp.pbone.net/pub/jpackage/1.5/mandrake-9.1/free with hdlist.cz
urpmi.addmedia --update updates http://distro.ibiblio.org/pub/linux/distributions/mandrake/Mandrake/updates/9.1/RPMS/
                                                                    with ../base/hdlist.cz
```

- This example script deletes at first the already registered sources in the Package Manager URPMI.
- Then it starts to register online sources "plf", "main", "contrib" etc.
- Be aware that the download of reference files can take a couple of minutes. A mirror can be down/not reachable.
- Please make sure you have the "main" and "contrib" source included before you start with installation of Typo3. You will need several packages to download.
- If the download of reference files doesn't work at all, please check the following things:
 1. Is your internet connection up and running ?
 2. Do you work behind a proxy ?
 3. Did you type in a URPMI mirror / source which is not available at present ?
- If necessary, you can also type in the command for adding a urpmi source directly over the shell. The script is just a way to make things easier/faster!

Webserver installation

Introduction

This chapter shows you, how and what to install for building Typo3 on your new Mandrake Server.

Apache

```
# urpmi apache2
# service httpd start
```

- This command will install the Apache 2 release on your server.
- After executing this command in the shell you might have to select certain packages to choose from as well as entering "y" to fulfill dependencies (additional, necessary packages will be installed).
- In this case please select apache2-mod.

PHP

```
# urpmi mod_php
# urpmi php-ini
```

- These commands will install the PHP Module for Apache and the configuration file "php.ini" for PHP.
- After executing this command in the shell you might have to select certain packages to choose from as well as entering "y" to fulfill dependencies (additional, necessary packages will be installed).
- In this case please select mod_php.

- For running Typo3 you need to configure the PHP configuration file.
- Please type in the following command:

```
# vi /etc/php.ini
```

- After the file has been opened in the editor “vi”, please click on “insert”.
- Search for the following variable: “Memory_limit = 8M” // Standard is 8M, not enough for Typo3!
- Please set the memory limit at least to “32M”, otherwise the Typo3 Extension Manager will not work correctly.

MySQL

```
# urpmi php-MySQL
# urpmi MySQL
# service mysql start // starts the database
# chkconfig mysql on 345 // set the database to “start automatically on booting”
```

- After executing this command in the shell you might have to select certain packages to choose from as well as entering “y” to fulfill dependencies (additional, necessary packages will be installed).
- These commands will install the MySQL database core modules as well as the plugins for PHP.
- Afterwards the database will be started and set as “start automatically on booting”.

Image Magick

```
# urpmi php-imagick
```

- Before installing Image Magick, you need to include the “contrib” URPMI source. If not available the installation will not work.
- After executing this command in the shell you might have to select certain packages to choose from as well as entering “y” to fulfill dependencies (additional, necessary packages will be installed).
- Be aware that the installation of Image Magick can include up to 42MB of additional packages.
- During the installation of Image Magick it seems common that some packages have bad signatures. Please select “y” to continue the installation, otherwise Image Magick will not be installed correctly.

GD Library

```
# urpmi php-gd
```

- After executing this command in the shell you might have to select certain packages to choose from as well as entering “y” to fulfill dependencies (additional, necessary packages will be installed).

Additional tools

```
# urpmi sshd // SSHD daemon for remote control of server
# urpmi gzip // compression tool like TAR
# urpmi catdoc // Used by theTypo3 extension “Indexed Search” to search in .doc files
# urpmi xpdf // Tool package which includes several scripts to search .pdf files; used by Typo3 extension “Indexed Search”
```

- After executing this command in the shell you might have to select certain packages to choose from as well as entering “y” to fulfill dependencies (additional, necessary packages will be installed).
- For using SSH you need to configure the file “hosts.allow”

```
# vi /etc/hosts.allow
```

- Please edit the file like this:

```
#
# hosts.allow This file describes the names of the hosts which are
#             allowed to use the local INET services, as decided
#             by the '/usr/sbin/tcpd' server.
#
sshd:192.168.1.1 // Please replace the IP 192.168.1.1 with your own IP address or the text "all" (security problem!!!)
```

- To find out what IP address you have, please use the following examples:

Example for Windows

Click on "START" than "execute" and type in "cmd", confirm with enter/return. A DOS-Windows will appear.
Type in "ipconfig" and confirm with enter/return.

Example for Mandrake Linux 9.1

```
# ifconfig
```

- To use "sshd:all" in hosts.allow might be a serious security issue. I do not suggest to do that.
- You may have problems to use an IP address because your dial-up IP is not a fixed IP and will change each time you dial-up with your Internet Service Provider.
- Save the file with "ESC" then ":wq".

Restart services

```
# service httpd restart // Apache restart
# service mysql restart // MySQL database restart
```

- After installing several packages you have to restart at least the Apache webserver to load the new packages into the running systems.

phpMyAdmin

- phpMyAdmin is an open source GUI for mySQL
- It is an easy way to configure your database engine for use with Typo3.
- Please download the software from:
<http://sourceforge.net/projects/phpmyadmin/>
- Alternatively you can download the software under Linux by typing in the following command in shell:

```
# wget {source/path of file}
```

- To find out the "source of file" visit the project website of phpMyAdmin and copy the path or search in google.com for other mirrors.

Download and Extract phpMyAdmin

1. Open project website
2. click on "Files"
3. select a version of phpMyAdmin (.tar or .gz)
4. Extract the archiv "/var/www/html/"

```
# tar -xf {filename}.tar
```

or

```
# gzip -d {filename}.gz
# tar -xf {extracted .gz file}.tar
```

ATTENTION, the combined/double extraction process has the following reason:
.gz Files at the project website of phpMyAdmin are double compressed/packed, therefore you have to

decompress in the same way.

- Most of the time the extracted phpMyAdmin directory has a very complicated name with a certain version number etc.
- To get rid of this, rename your directory into "phpMyAdmin" in the following way:

```
# mv {complicated directory name} phpMyAdmin
```

- If your phpMyAdmin directory is not in /var/www/html/ move it with:

```
# mv phpMyAdmin /var/www/html/
```

- Open your browser (e.g. Conquerer for Linux) and type in the following URL:
http://{your hostname}/phpMyAdmin/index.php
- Create a new database (e.g. "typo3")
- Delete standard users except the root
- Create user (e.g. Typo3) and give him local rights to your new typo3 database (NO global rights needed!)
- Set a password for user "root" and close the browser (you need to tell phpMyAdmin by now, what root password you have created)
- Open the file config.inc.php:

```
# cd /var/www/html/phpMyAdmin/  
# vi config.inc.php
```

- Please include the root password

```
$$++;  
$cfg['Servers'][$i]['host']      = 'localhost'; // MySQL hostname or IP address  
$cfg['Servers'][$i]['port']     = '';        // MySQL port - leave blank for default port  
$cfg['Servers'][$i]['socket']   = '';        // Path to the socket - leave blank for default socket  
$cfg['Servers'][$i]['connect_type'] = 'tcp'; // How to connect to MySQL server ('tcp' or 'socket')  
$cfg['Servers'][$i]['compress'] = FALSE;   // Use compressed protocol for the MySQL connection // (requires PHP >= 4.3.0)  
$cfg['Servers'][$i]['controluser'] = '';    // MySQL control user settings  
$cfg['Servers'][$i]['controlpass'] = '';    // access to the "mysql/user" // and "mysql/db" tables  
$cfg['Servers'][$i]['auth_type'] = 'config'; // Authentication method (config, http or cookie based?)  
$cfg['Servers'][$i]['user']     = 'root';   // MySQL user  
$cfg['Servers'][$i]['password'] = '{replace with your password}'; // MySQL password (only needed // with 'config' auth_type)  
$cfg['Servers'][$i]['only_db']  = ''
```

- Save the file with "ESC" then ":wq".
- Now you should be able to enter the GUI phpMyAdmin without problems.
- Make sure you secure the directory phpMyAdmin with a password, otherwise everybody can edit your databases...

Typo3 verbose installation

Comment

- The verbose installation of Typo3 has been described by the document "Administrator Guide".
- You can download the file from the development website <http://www.typo3.org>

TODO

- I did not include my screenshots for the Mandrake 9.1 Setup because I was just allowed to upload an extension with a maximum of 100Kb. I will speak to Kasper about that and evaluate the document later.
- Adding the verbose installation of Typo3, described by "Administrator Guide", just to make things easier (you do not need to download two files...).
- Spelling/Grammar check of the document
- Translation to other languages
- ...do you have anything else in mind? Write me an email!