

**Set-Up
Documentation for
SOVA:
Simple Online Video
Archive**



creative commons
C O M M O N S D E E D

Attribution-NonCommercial-ShareAlike 2.0

You are free:

- to copy, distribute, display, and perform the work
- to make derivative works

Under the following conditions:



Attribution. You must give the original author credit.



Noncommercial. You may not use this work for commercial purposes.



Share Alike. If you alter, transform, or build upon this work, you may distribute the resulting work only under a license identical to this one.

- For any reuse or distribution, you must make clear to others the license terms of this work.
- Any of these conditions can be waived if you get permission from the copyright holder.

Your fair use and other rights are in no way affected by the above.

This is a human-readable summary of the [Legal Code \(the full license\)](#).

[Disclaimer](#) 

Contents

1. Introduction	Page 4
2. Installing LAMP	Page 4
2.1 Test Apache and PHP	Page 9
2.2 Installing eZpublish	Page 11
2.3 eZpublish Installation	Page 11
2.3.1 Program Files	Page 11
2.3.2 First time installation (MySQL)	Page 11
2.3.3 Adding Pre-Defined Data	Page 12
2.4 Now What?	Page 12
2.5 Post Install Checklist	Page 13
2.6 Troubleshooting	Page 13
3. Glossary	Page 16
Appendix A: Creative Commons License	Page 17

1. Introduction

SOVA, the Simple Online Video Archive, is installed on a **LAMP** configured server. **LAMP** stands for the Linux operating system (in the following examples Fedora Core 2), the **A**pache web server, the **M**ySQL database server and the **P**HP scripting language.

SOVA is based on a content management system (CMS) called eZpublish. A CMS is a piece of software designed to simplify the process of creating or editing of content on a website. This system enables a content writer to easily add, modify or delete content without having any knowledge of web mark-up languages (HTML, XML). Functions of the SOVA eZpublish implementation include web-based publishing, management of formatting, metadata searches and media retrieval. There is also the additional functionality provided by the eZmediamanager module.

2. Installing LAMP

From scratch

If you are building a SOVA system from scratch you can choose to install Apache (including mod_rewrite), MySQL server and PHP (including the php-mysql module to enable PHP applications to use MySQL databases) during the Linux installation. Please bear in mind that it is likely that updated versions of the software are available. To install updated versions or to install components that you may have missed follow the instructions below. If you choose to do this it is recommended that you remove the software first.

To uninstall use `rpm -e ApplicationName`

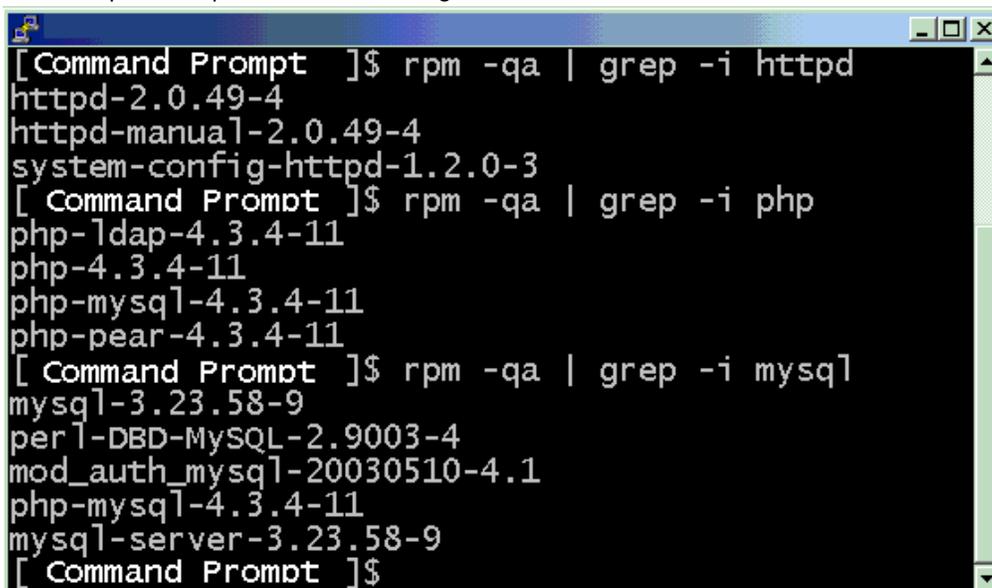
From an existing system

It is likely that your standard installation will have one or more of the components need for the LAMP configuration.

Firstly we will find out what RPM's are already installed, we can do that with the commands below:

```
rpm -qa | grep -i httpd  
rpm -qa | grep -i php  
rpm -qa | grep -i mysql
```

Here is an example of output from a functioning machine:



```
[Command Prompt ]$ rpm -qa | grep -i httpd  
httpd-2.0.49-4  
httpd-manual-2.0.49-4  
system-config-httpd-1.2.0-3  
[Command Prompt ]$ rpm -qa | grep -i php  
php-ldap-4.3.4-11  
php-4.3.4-11  
php-mysql-4.3.4-11  
php-pear-4.3.4-11  
[Command Prompt ]$ rpm -qa | grep -i mysql  
mysql-3.23.58-9  
perl-DBD-MySQL-2.9003-4  
mod_auth_mysql-20030510-4.1  
php-mysql-4.3.4-11  
mysql-server-3.23.58-9  
[Command Prompt ]$
```

The important applications here are:

httpd
php
php-mysql
mysql
mod_auth_mysql
php-mysql
mysql-server

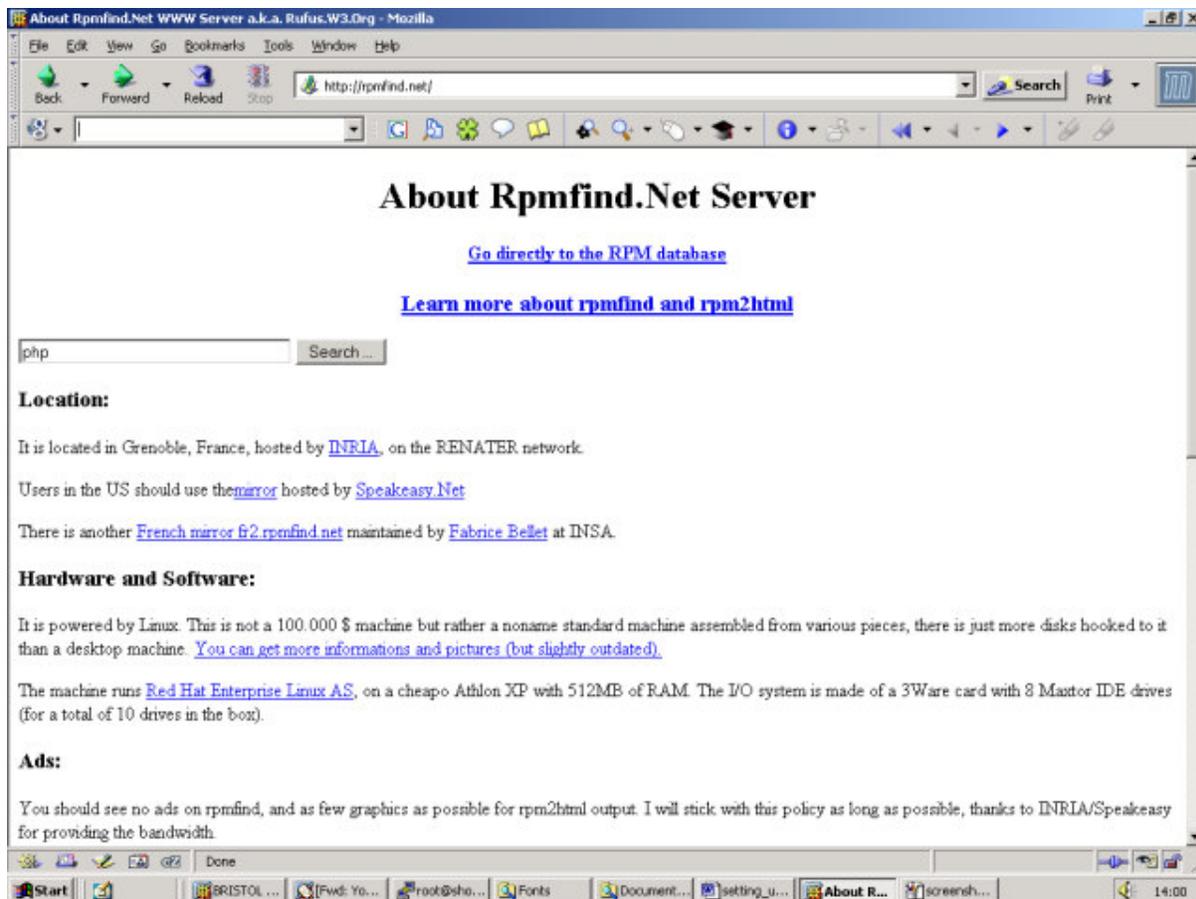
Installing via RPM

To install applications from source code, you will need to have a compiler (gcc) installed. You will also need to be logged in with 'root' privileges because you'll be inserting files into directories not writable by standard users.

Download the RPM files from an RPM repository:

<http://freshrpms.net/>
<http://rpmfind.net/>

From graphic web browser:

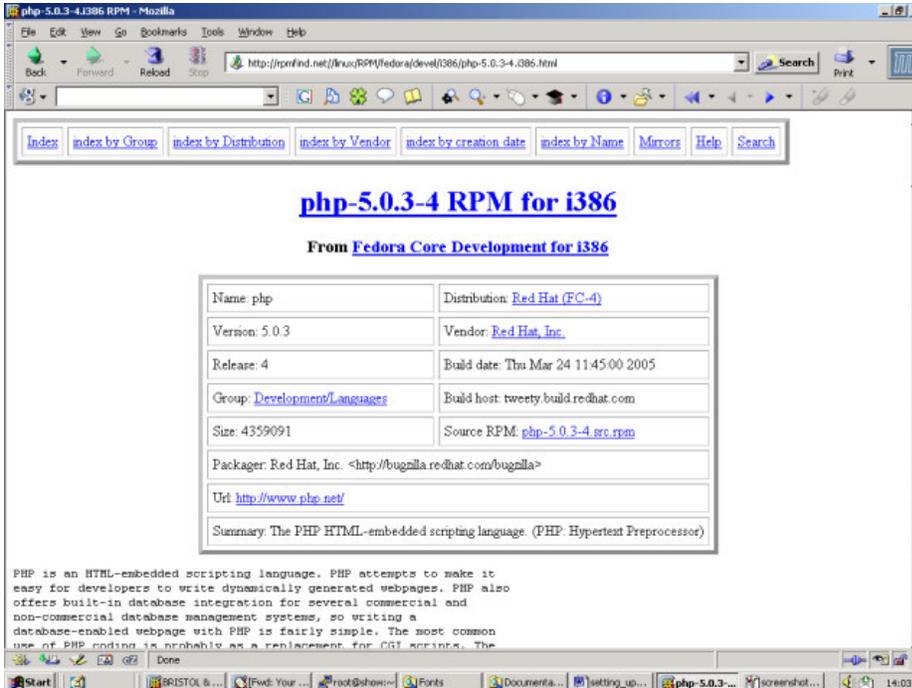


Front Page – Search for application

	<p>This is a local e-Democracy National Project, part of an £80m ODPM funded programme to deliver e-government solutions.</p> <p>www.e-democracy.gov.uk</p>	
---	---	---



Search results – locate correct application



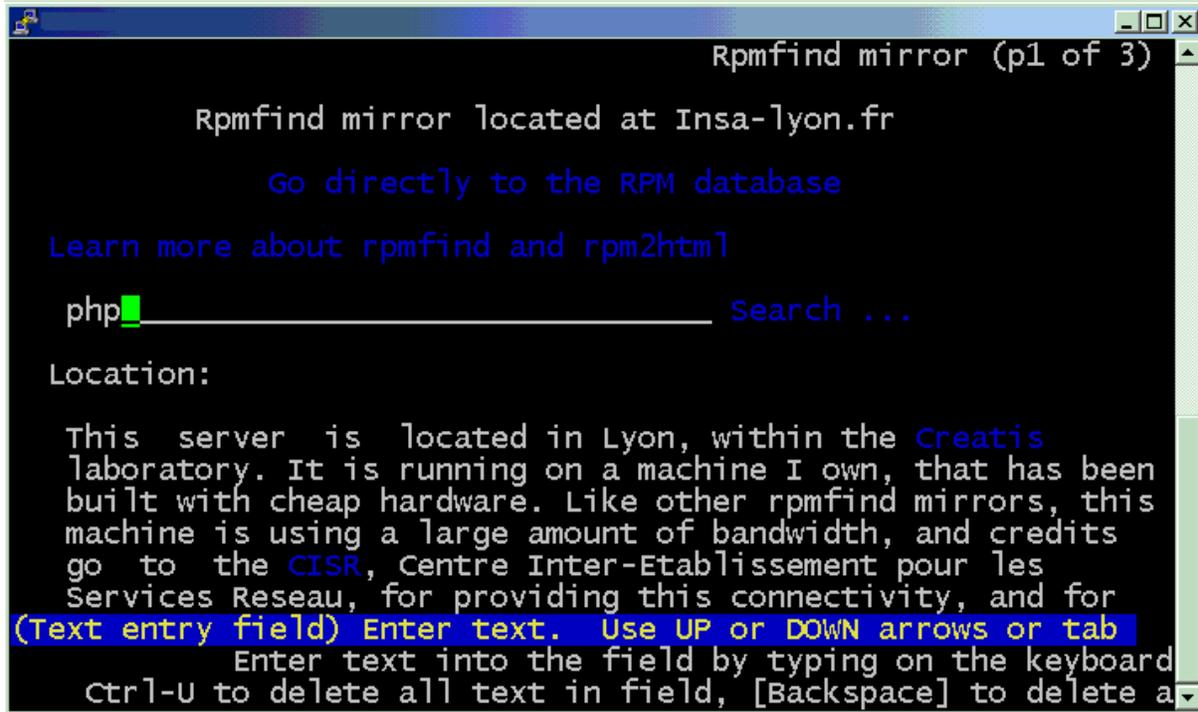
Select correct application

To download from the command line using Lynx:

Type

\$ lynx <http://rpmfind.net/>

Select **Search**



```
Rpmfind mirror (p1 of 3)

Rpmfind mirror located at Insa-lyon.fr

  Go directly to the RPM database

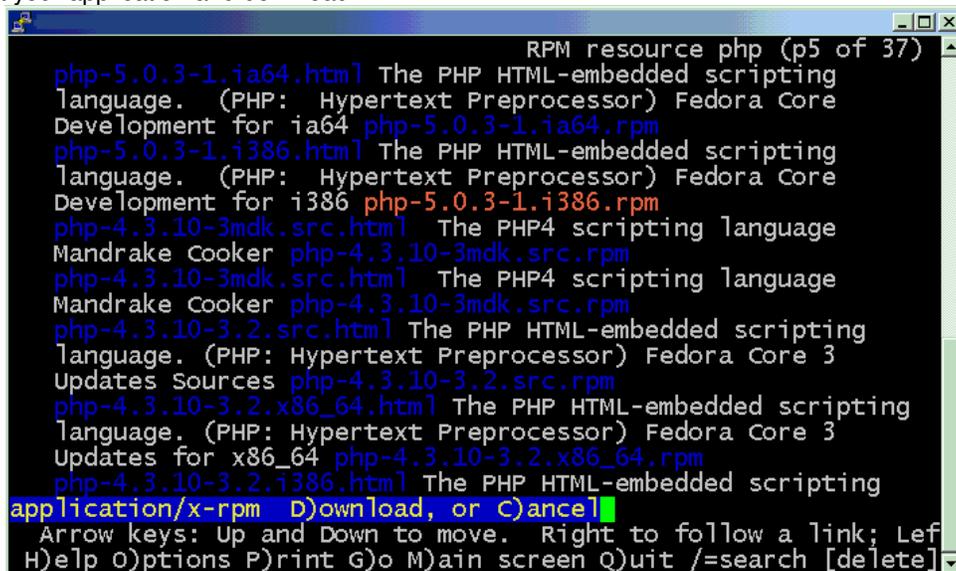
Learn more about rpmfind and rpm2html

php_____ Search ...

Location:

This server is located in Lyon, within the Creatis
laboratory. It is running on a machine I own, that has been
built with cheap hardware. Like other rpmfind mirrors, this
machine is using a large amount of bandwidth, and credits
go to the CISR, Centre Inter-Etablissement pour les
Services Reseau, for providing this connectivity, and for
(Text entry field) Enter text. Use UP or DOWN arrows or tab
Enter text into the field by typing on the keyboard
ctrl-U to delete all text in field, [Backspace] to delete a
```

Now select your application and download.



```
RPM resource php (p5 of 37)

php-5.0.3-1.ia64.html The PHP HTML-embedded scripting
language. (PHP: Hypertext Preprocessor) Fedora Core
Development for ia64 php-5.0.3-1.ia64.rpm
php-5.0.3-1.i386.html The PHP HTML-embedded scripting
language. (PHP: Hypertext Preprocessor) Fedora Core
Development for i386 php-5.0.3-1.i386.rpm
php-4.3.10-3mdk.src.html The PHP4 scripting language
Mandrake Cooker php-4.3.10-3mdk.src.rpm
php-4.3.10-3mdk.src.html The PHP4 scripting language
Mandrake Cooker php-4.3.10-3mdk.src.rpm
php-4.3.10-3.2.src.html The PHP HTML-embedded scripting
language. (PHP: Hypertext Preprocessor) Fedora Core 3
Updates Sources php-4.3.10-3.2.src.rpm
php-4.3.10-3.2.x86_64.html The PHP HTML-embedded scripting
language. (PHP: Hypertext Preprocessor) Fedora Core 3
Updates for x86_64 php-4.3.10-3.2.x86\_64.rpm
php-4.3.10-3.2.i386.html The PHP HTML-embedded scripting
application/x-rpm D)ownload, or C)ancel
Arrow keys: Up and Down to move. Right to follow a link; Left
H)elp O)ptions P)rint G)o M)ain screen Q)uit /=search [delete]
```

Once the application is downloaded you can then install.

```
rpm -ivh php-5.0.3-1.i386.rpm
```

i = install, v = verbose, h = hash

Follow these steps for the rest of the required applications.

To download with apt-get

Apt (Advanced Package Tool) is in the Debian distribution of Linux but is also available for Fedora and is an excellent package manager.

First you'll need to install apt using downloaded RPM's – you can download these from;

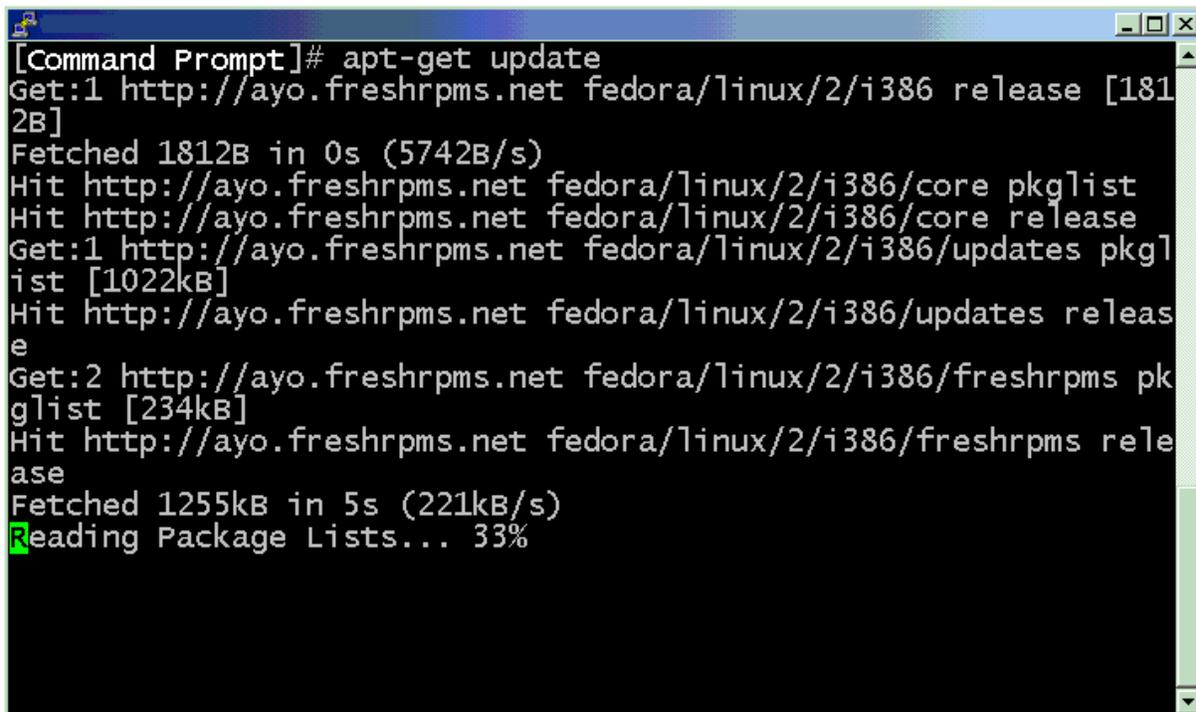
<http://apt.freshrpms.net/>

You will find three files. Install them using:

```
rpm -ivh apt-*
```

Once installed you will need to update the apt databases, this is done with the following command:

```
apt-get update
```



```
[Command Prompt]# apt-get update
Get:1 http://ayo.freshrpms.net fedora/linux/2/i386 release [181
2B]
Fetched 1812B in 0s (5742B/s)
Hit http://ayo.freshrpms.net fedora/linux/2/i386/core pkglist
Hit http://ayo.freshrpms.net fedora/linux/2/i386/core release
Get:1 http://ayo.freshrpms.net fedora/linux/2/i386/updates pkgl
ist [1022kB]
Hit http://ayo.freshrpms.net fedora/linux/2/i386/updates releas
e
Get:2 http://ayo.freshrpms.net fedora/linux/2/i386/freshrpms pk
glist [234kB]
Hit http://ayo.freshrpms.net fedora/linux/2/i386/freshrpms rele
ase
Fetched 1255kB in 5s (221kB/s)
Reading Package Lists... 33%
```

Now this is done you can install the application by using the following command structures:

```
apt-get install applicationName
```

If apt cannot find your application check the database, you may have misspelt it:

```
apt-cache search applicationName
```

Starting the applications

Once installed you will need to run the applications. In RedHat or Fedora Core, you can initially start programs with the service command:

```
service httpd start  
service php start  
service mysqld start
```

It is better that the application starts automatically when the server is switched on. To do this you can use the chkconfig command:

```
chkconfig --level 345 httpd on  
chkconfig --level 345 php on  
chkconfig --level 345 mysqld on
```

2.1 Test Apache and PHP

These two application are tested together simply by creating a short PHP script and saving it in the web root directory - default location /var/www/html/

```
vi /var/www/html/php_test.php
```

This will open up a new file 'php_test.php' in the vi editor

Now type in the following [hit Insert or 'I']:

```
<?php
```

```
phpinfo();
```

```
?>
```

Save & exit [hit Esc key and type ':x']

Now point your browser at the file you have just created:

```
http://serveraddress/php_test.php
```

This should display an output of PHP information as shown below

PHP Version 4.3.6	
System	Linux 2.6.5-1.358smp #1 SMP Sat May 8 09:25:36 EDT 2004 i686
Build Date	May 19 2004 11:12:20
Configure Command	<pre> '/configure' '--host=i386-redhat-linux' '--build=i386-redhat-linux' '--target=i386-redhat-linux-gnu' '--program-prefix=' '--prefix=/usr' '--exec-prefix=/usr' '--bindir=/usr/bin' '--sbindir=/usr/sbin' '--sysconfdir=/etc' '--datadir=/usr/share' '--includedir=/usr/include' '--libdir=/usr/lib' '--libexecdir=/usr/libexec' '--localstatedir=/var' '--sharedstatedir=/usr/com' '--mandir=/usr/share/man' '--infodir=/usr/share/info' '--cache-file=./config.cache' '--with-config-file-path=/etc' '--with-config-file-scan-dir=/etc/php.d' '--enable-force-cgi-redirect' '--disable-debug' '--enable-pic' '--disable-rpath' '--enable-inline-optimization' '--with-bz2' '--with-db4=/usr' '--with-curl' '--with-exec-dir=/usr/bin' '--with-freetype-dir=/usr' '--with-png-dir=/usr' '--with-gd' '--enable-gd-native-ttf' '--without-gdgm' '--with-gettext' '--with-ncurses' '--with-gmp' '--with-iconv' '--with-jpeg-dir=/usr' '--with-openssl' '--with-png' '--with-pspell' '--with-regex=system' '--with-xml' '--with-xmlrpc=/usr' '--with-dom=shared,/usr' '--with-dom-xslt=/usr' '--with-dom-exslt=/usr' '--with-xmlrpc=shared' '--with-pcre-regex=/usr' '--with-zlib' '--with-layout=GNU' '--enable-bcmath' '--enable-xf' '--enable-ftp' '--enable-magic-quotes' '--enable-safe-mode' '--enable-sockets' '--enable-syssem' '--enable-sysvshm' '--enable-track-vars' '--enable-trans-sid' '--enable-yp' '--enable-wddx' '--with-pear=/usr/share/pear' '--with-imap=shared' '--with-imap-ssl' '--with-kerberos' '--with-ldap=shared' '--with-mysql=shared,/usr' '--with-pgsql=shared' '--with-snmp=shared,/usr' '--with-snmp=shared' '--enable-ucd-snmp-hack' '--with-unixODBC=shared,/usr' '--enable-memory-limit' '--enable-bcmath' '--enable-shmop' '--enable-calendar' '--enable-dbx' '--enable-dio' '--enable-mcal' '--enable-mbstring' '--enable-mbstr-enc-trans' '--enable-mbregex' '--with-apxs2=/usr/sbin/apxs' </pre>
Server API	Apache 2.0 Handler
Virtual Directory Support	disabled
Configuration File (php.ini) Path	/etc/php.ini
Scan this dir for additional .ini files	/etc/php.d
additional .ini files parsed	/etc/php.d/mysql.ini
PHP API	20020918
PHP Extension	20020429
Zend Extension	20021010
Debug Build	no
Thread Safety	disabled
Registered PHP Streams	php, http, ftp, https, ftps, compress.bzip2, compress.zlib

Test Mysql

To test MySQL we can change the MySQL root password. This is important as a default installation leaves the password blank:

```
mysqladmin -u root password your_password
```

Additional Software

In addition to the LAMP configuration eZpublish requires that ImageMagick (<http://www.imagemagick.org/>) is installed:

```
apt-get install ImageMagick
```

Or you can download and install from an rpm taken from your preferred rpm repository.

2.2 Installing eZpublish

You can download eZpublish here:

http://www.ez.no/community/news/ez_publish_229_release

It is recommended that you read the INSTALL.txt file that comes with the application.

Here are the instructions taken from eZpublish INSTALL.txt that are most relevant to this installation.

2.3 eZ publish Installation

2.3.1 Program Files

To install the eZ publish package in your document root directory, first you need to unpack the software in a temporary directory:

```
# cd /tmp
# tar zxvf /path/to/ezpublish-2.0.tar.gz
```

The next step is to move the files to your document root:

```
# mv /tmp/publish_dist /your/apache/documentroot
```

When all this is done you need to tell eZ publish a little about the site you are running. You will need to edit the "site.ini" file which you will find in the document root:

```
# cd /your/apache/documentroot
# vi site.ini
```

Instead of vi you can use your preferred text editor. You will need to add information about the username, hostname and password of your database. More information on what you can do with "site.ini" can be found in the "eZ publish Customisation Guide".

The next important step is to run the script "modfix.sh".

```
# ./modfix.sh
```

2.3.2. First time installation (MySQL)

Now you need to create a database in MySQL, the default name we use is publish, but you can change that to whatever is appropriate.

```
# mysqladmin create publish
```

Add a publish user in MySQL. To add a user you can use the MySQL client to log on to mysql and then create the user:

```
# mysql > grant all on publish.* to publish@localhost identified by "secret";
```

where "secret" is your password. Then you need to add the default eZ publish data into your newly created database:

```
# mysql -uroot -p publish < sql/publish_mysql.sql
```

2.3.3 Adding Pre-Defined Data

If you want to add the pre-defined data of the distribution you should not add any data manually to the site before executing these commands.

First we need to add files and images which are needed by the database.

```
# tar zpxvf data.tar.gz
```

Then we need to run "modfix.sh" to make sure that everything is readable.

```
# ./modfix.sh
```

Then we need to send the SQL data into the database:

```
# mysql -upublish -ppublish publish < sql/data_mysql.sql
```

Finally we run clearcache (N.B. a new feature in eZ publish 2.2 is the possibility of clearing the cache from the admin site) to make sure that everything presented is cached correctly:

```
# ./clearcache.sh
```

2.4 Now What?

After installing eZ publish you can test your site through the URL <http://www.yoursite.com/> and you can administer your site from the URL <http://admin.yoursite.com/> - of course, if you did anything different the names of the admin and the public site might be different.

NOTE: The default user name and password for your site will be admin/publish. Remember to change the password.

2.5 Post Install Checklist

1. Does Apache run?
2. Does PHP run/work as an Apache module?
3. Does MySQL run?
4. Can you access your virtual hosts at all?
5. Does the user site work?
6. Does the admin site work?
7. Consider this: all eZ publish sites has an admin site, perhaps you should call the admin host something different than admin?
8. Check that you've downloaded and read the configuration manual. A quick tip is to read through the file "site.ini" and change any e-mail addresses, passwords and so on to fit your own choices.
9. Log in on your admin site (<http://admin.yoursite.com/>). You will be presented with a page which will list any install problems. If any problems appear read the error message presented and follow any instructions. If that fails, read the FAQ. Then go to <http://developer.ez.no> and search the forum for anyone who has had the same problem. Also check the bug list for any open bugs covering your problem. Finally you should register to the mailing list and try asking for help there.
10. If everything is okay go to the "user" module and change the e-mail address of the site administrator immediately.
11. Change the password of the administration user to something only you know.
12. Start browsing the public part of your site, just to check that everything is working - some of the articles supplied as default will inform you about features of the software.
13. Check that ImageMagick is working. Try to upload an image to your site.

2.6 Troubleshooting

Missing Compiler/Can not Compile (C++/C)

When compiling PHP and other support programs (like ImageMagick) you need the GCC compiler. It is recommended that you use the GCC compiler which was shipped with your particular Linux distro or Unix system. The Introduction lists some sites where you can download pre-compiled versions of software for some different Unix versions. Please note that you must compile PHP on your own.

2.7 Installing eZMediaManager

eZMediaManager provides extra functionality to eZpublish to allow:

- Creation of eZarticle articles that store Dublin Core metadata
- Creation of eZMediaCatalogue items - upload files to them, associate these with Dublin Core Metadata and enter then in the corresponding eZArticle article

The entire configuration is done through the eZPublish site.ini file. Through this file, you can specify how many times Dublin Core elements can be repeated, word lists for custom vocabularies as well as set some specific behaviors. These are documented in the site.ini file supplied with eZMediaManage.

STEP 1 - Create the eZMediaManage tables

Initially, you need to create tables for eZMediaManage to store its Dublin Core Metadata. This table is for MySQL and does not yet support other Databases.

A table structure is supplied in the file ezmediamanage/create_tables.sql

You can create the tables with the following command line:

```
mysql -u root -p < /path-to-ezmediamanage/create_tables.sql
```

The eZ Publish databases must exist before this is done. Should you delete your whole eZPublish database, please remember to re-create this table as shown above.

STEP 2 - eZPublish bugfix

There is a problem in eZPublish where only a limited file types are accepted (by default: .mpg, .mpeg, .avi, .mov, .swf, .wmv, .asf, .rm). You may choose to accept this limitation but this is quite easy to correct. Unfortunately, you have to make a minor change to one of the eZPublish source files.

In version 2.7, you must remove line 104 to 132 from the classes/ezmediafile.php. This is the &information() function, it starts with:

```
function &information( $file, $use_default = false )  
{
```

and ends with:

```
}
```

You must replace the content of that function (i.e. what is between brackets) with the following two lines:

```
// ezmediamanage modification to extend list of supported files  
include_once( "ezmediamanage/admin/fileextensions.php" );
```

You can then add extra types you need in this fileextensions.php file, following the exact same syntax as is already in the file.

NB: If you upgrade your eZ Publish system you must keep this change in mind and either reapply this change if need be or make sure that this has been corrected in latter versions.

STEP 3 - Change template for streaming to work

For HTTP streaming to work properly, you need to change the ezarticletags.tpl template.

You need to make a change in the ezarticle/user/templates/[standard]/ezarticletags.tpl template. In the media_tpl section which starts with

```
<!-- BEGIN media_tpl -->
```

and ends with

```
<!-- END media_tpl -->
```

you need to change the line:

```
from: <embed src="{www_dir}{media_uri}" {attribute_string} />  
to: <embed src="/mediamanage/stream/{media_id}" {attribute_string} />
```

You may just comment out the first one.

END INSTALL - You can now start using eZMediaManage.

You will now have a fully-functioning LAMP server running eZpublish with the eZmediaManager module.

Glossary

Apache	Open source Web server.	http://www.apache.org/
Application	Software program such as Microsoft Word, Real Player	
APT	Advanced Packaging Tool, eases installation of software	
CMS	Content Management System a database driven application that manages information	
Compiler	a program that decodes instructions written in a higher order language and produces an assembly language program	
Database	computerized collection of information.	
Ezmedia Manager	Module for Ezpublish	http://www.ez.no/ez_publish/download/all_releases/ez_publish_2_2_releases/stable/ http://www.ez.no/community/ http://fedora.redhat.com/
Ezpublish	Open source content management system	
Fedora Core 2	Fedora is one of many Linux distributions. It is an operating system that uses free software development practices. The Fedora Project is a Red-Hat-sponsored and community-supported open source project.	
HTML	Hypertext Markup language	
LAMP	Linux, Apache, Mysql, Php.	
Linux	Linux is an open-source operating system	http://www.linux.org/
Metadata	Structured data about data, describes the attributes of an object	http://soma-dev.sourceforge.net/
Mysql	A Relational database management system that uses SQL (Structured Query Language)	http://www.mysql.com/
PHP	An open-source scripting language (PHP Hypertext Preprocessor), used in the creation of dynamic Web sites.	http://www.php.net/
RPM	Red Hat Package Management, eases installation of software	
Web Browser	A program used to look at the World Wide Web, such as Mozilla, Internet Explorer	http://mozilla.org/
XML	eXtensible Markup Language	

Appendix A

Creative Commons License

Attribution-NonCommercial-ShareAlike 2.0

CREATIVE COMMONS CORPORATION IS NOT A LAW FIRM AND DOES NOT PROVIDE LEGAL SERVICES. DISTRIBUTION OF THIS LICENSE DOES NOT CREATE AN ATTORNEY-CLIENT RELATIONSHIP. CREATIVE COMMONS PROVIDES THIS INFORMATION ON AN "AS-IS" BASIS. CREATIVE COMMONS MAKES NO WARRANTIES REGARDING THE INFORMATION PROVIDED, AND DISCLAIMS LIABILITY FOR DAMAGES RESULTING FROM ITS USE.

License

THE WORK (AS DEFINED BELOW) IS PROVIDED UNDER THE TERMS OF THIS CREATIVE COMMONS PUBLIC LICENSE ("CCPL" OR "LICENSE"). THE WORK IS PROTECTED BY COPYRIGHT AND/OR OTHER APPLICABLE LAW. ANY USE OF THE WORK OTHER THAN AS AUTHORIZED UNDER THIS LICENSE OR COPYRIGHT LAW IS PROHIBITED.

BY EXERCISING ANY RIGHTS TO THE WORK PROVIDED HERE, YOU ACCEPT AND AGREE TO BE BOUND BY THE TERMS OF THIS LICENSE. THE LICENSOR GRANTS YOU THE RIGHTS CONTAINED HERE IN CONSIDERATION OF YOUR ACCEPTANCE OF SUCH TERMS AND CONDITIONS.

1. Definitions

- a. **"Collective Work"** means a work, such as a periodical issue, anthology or encyclopedia, in which the Work in its entirety in unmodified form, along with a number of other contributions, constituting separate and independent works in themselves, are assembled into a collective whole. A work that constitutes a Collective Work will not be considered a Derivative Work (as defined below) for the purposes of this License.
- b. **"Derivative Work"** means a work based upon the Work or upon the Work and other pre-existing works, such as a translation, musical arrangement, dramatization, fictionalization, motion picture version, sound recording, art reproduction, abridgment, condensation, or any other form in which the Work may be recast, transformed, or adapted, except that a work that constitutes a Collective Work will not be considered a Derivative Work for the purpose of this License. For the avoidance of doubt, where the Work is a musical composition or sound recording, the synchronization of the Work in timed-relation with a moving image ("synching") will be considered a Derivative Work for the purpose of this License.
- c. **"Licensor"** means the individual or entity that offers the Work under the terms of this License.
- d. **"Original Author"** means the individual or entity who created the Work.
- e. **"Work"** means the copyrightable work of authorship offered under the terms of this License.
- f. **"You"** means an individual or entity exercising rights under this License who has not previously violated the terms of this License with respect to the Work, or who has received express permission from the Licensor to exercise rights under this License despite a previous violation.
- g. **"License Elements"** means the following high-level license attributes as selected by Licensor and indicated in the title of this License: Attribution, Noncommercial, ShareAlike.

2. Fair Use Rights. Nothing in this license is intended to reduce, limit, or restrict any rights arising from fair use, first sale or other limitations on the exclusive rights of the copyright owner under copyright law or other applicable laws.

3. License Grant. Subject to the terms and conditions of this License, Licensor hereby grants You a worldwide, royalty-free, non-exclusive, perpetual (for the duration of the applicable copyright) license to exercise the rights in the Work as stated below:

- a. to reproduce the Work, to incorporate the Work into one or more Collective Works, and to reproduce the Work as incorporated in the Collective Works;
- b. to create and reproduce Derivative Works;
- c. to distribute copies or phonorecords of, display publicly, perform publicly, and perform publicly by means of a digital audio transmission the Work including as incorporated in Collective Works;
- d. to distribute copies or phonorecords of, display publicly, perform publicly, and perform publicly by means of a digital audio transmission Derivative Works;

The above rights may be exercised in all media and formats whether now known or hereafter devised. The above rights include the right to make such modifications as are technically necessary to exercise the rights in other media and formats. All rights not expressly granted by Licensor are hereby reserved, including but not limited to the rights set forth in Sections 4(e) and 4(f).

4. Restrictions. The license granted in Section 3 above is expressly made subject to and limited by the following restrictions:

- a. You may distribute, publicly display, publicly perform, or publicly digitally perform the Work only under the terms of this License, and You must include a copy of, or the Uniform Resource Identifier for, this License with every copy or phonorecord of the Work You distribute, publicly display, publicly perform, or publicly digitally perform. You may not offer or impose any terms on the Work that alter or restrict the terms of this License or the recipients' exercise of the rights granted hereunder. You may not sublicense the Work. You must keep intact all notices that refer to this License and to the disclaimer of warranties. You may not distribute, publicly display, publicly perform, or publicly digitally perform the Work with any technological measures that control access or use of the Work in a manner inconsistent with the terms of this License Agreement. The above applies to the Work as incorporated in a Collective Work, but this does not require the Collective Work apart from the Work itself to be made subject to the terms of this License. If You create a Collective Work, upon notice from any Licensor You must, to the extent practicable, remove from the Collective Work any reference to such Licensor or the Original Author, as requested. If You create a Derivative Work, upon notice from any Licensor You must, to the extent practicable, remove from the Derivative Work any reference to such Licensor or the Original Author, as requested.
- b. You may distribute, publicly display, publicly perform, or publicly digitally perform a Derivative Work only under the terms of this License, a later version of this License with the same License Elements as this License, or a Creative Commons iCommons license that contains the same License Elements as this License (e.g. Attribution-NonCommercial-ShareAlike 2.0 Japan). You must include a copy of, or the Uniform Resource Identifier for, this License or other license specified in the previous sentence with every copy or phonorecord of each Derivative Work You distribute, publicly display, publicly perform, or publicly digitally perform. You may not offer or impose any terms on the Derivative Works that alter or restrict the terms of this License or the recipients' exercise of the rights granted hereunder, and You must keep intact all notices that refer to this License and to the disclaimer of warranties. You may not distribute, publicly display, publicly perform, or publicly digitally perform the Derivative Work with any technological measures that control access or use of the Work in a manner inconsistent with the terms of this License Agreement. The above applies to the Derivative Work as incorporated in a Collective Work, but this does not require the Collective Work apart from the Derivative Work itself to be made subject to the terms of this License.

- c. You may not exercise any of the rights granted to You in Section 3 above in any manner that is primarily intended for or directed toward commercial advantage or private monetary compensation. The exchange of the Work for other copyrighted works by means of digital file-sharing or otherwise shall not be considered to be intended for or directed toward commercial advantage or private monetary compensation, provided there is no payment of any monetary compensation in connection with the exchange of copyrighted works.
- d. If you distribute, publicly display, publicly perform, or publicly digitally perform the Work or any Derivative Works or Collective Works, You must keep intact all copyright notices for the Work and give the Original Author credit reasonable to the medium or means You are utilizing by conveying the name (or pseudonym if applicable) of the Original Author if supplied; the title of the Work if supplied; to the extent reasonably practicable, the Uniform Resource Identifier, if any, that Licensor specifies to be associated with the Work, unless such URI does not refer to the copyright notice or licensing information for the Work; and in the case of a Derivative Work, a credit identifying the use of the Work in the Derivative Work (e.g., "French translation of the Work by Original Author," or "Screenplay based on original Work by Original Author"). Such credit may be implemented in any reasonable manner; provided, however, that in the case of a Derivative Work or Collective Work, at a minimum such credit will appear where any other comparable authorship credit appears and in a manner at least as prominent as such other comparable authorship credit.
- e. For the avoidance of doubt, where the Work is a musical composition:
 - i. **Performance Royalties Under Blanket Licenses.** Licensor reserves the exclusive right to collect, whether individually or via a performance rights society (e.g. ASCAP, BMI, SESAC), royalties for the public performance or public digital performance (e.g. webcast) of the Work if that performance is primarily intended for or directed toward commercial advantage or private monetary compensation.
 - ii. **Mechanical Rights and Statutory Royalties.** Licensor reserves the exclusive right to collect, whether individually or via a music rights agency or designated agent (e.g. Harry Fox Agency), royalties for any phonorecord You create from the Work ("cover version") and distribute, subject to the compulsory license created by 17 USC Section 115 of the US Copyright Act (or the equivalent in other jurisdictions), if Your distribution of such cover version is primarily intended for or directed toward commercial advantage or private monetary compensation.
- f. **Webcasting Rights and Statutory Royalties.** For the avoidance of doubt, where the Work is a sound recording, Licensor reserves the exclusive right to collect, whether individually or via a performance-rights society (e.g. SoundExchange), royalties for the public digital performance (e.g. webcast) of the Work, subject to the compulsory license created by 17 USC Section 114 of the US Copyright Act (or the equivalent in other jurisdictions), if Your public digital performance is primarily intended for or directed toward commercial advantage or private monetary compensation.

5. Representations, Warranties and Disclaimer

UNLESS OTHERWISE MUTUALLY AGREED TO BY THE PARTIES IN WRITING, LICENSOR OFFERS THE WORK AS-IS AND MAKES NO REPRESENTATIONS OR WARRANTIES OF ANY KIND CONCERNING THE WORK, EXPRESS, IMPLIED, STATUTORY OR OTHERWISE, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF TITLE, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NONINFRINGEMENT, OR THE ABSENCE OF LATENT OR OTHER DEFECTS, ACCURACY, OR THE PRESENCE OF ABSENCE OF ERRORS, WHETHER OR NOT DISCOVERABLE. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OF IMPLIED WARRANTIES, SO SUCH EXCLUSION MAY NOT APPLY TO YOU.

6. Limitation on Liability. EXCEPT TO THE EXTENT REQUIRED BY APPLICABLE LAW, IN NO EVENT WILL LICENSOR BE LIABLE TO YOU ON ANY LEGAL THEORY FOR ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL, PUNITIVE OR EXEMPLARY DAMAGES ARISING OUT OF THIS LICENSE OR THE

USE OF THE WORK, EVEN IF LICENSOR HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

7. Termination

- a. This License and the rights granted hereunder will terminate automatically upon any breach by You of the terms of this License. Individuals or entities who have received Derivative Works or Collective Works from You under this License, however, will not have their licenses terminated provided such individuals or entities remain in full compliance with those licenses. Sections 1, 2, 5, 6, 7, and 8 will survive any termination of this License.
- b. Subject to the above terms and conditions, the license granted here is perpetual (for the duration of the applicable copyright in the Work). Notwithstanding the above, Licensor reserves the right to release the Work under different license terms or to stop distributing the Work at any time; provided, however that any such election will not serve to withdraw this License (or any other license that has been, or is required to be, granted under the terms of this License), and this License will continue in full force and effect unless terminated as stated above.

8. Miscellaneous

- a. Each time You distribute or publicly digitally perform the Work or a Collective Work, the Licensor offers to the recipient a license to the Work on the same terms and conditions as the license granted to You under this License.
- b. Each time You distribute or publicly digitally perform a Derivative Work, Licensor offers to the recipient a license to the original Work on the same terms and conditions as the license granted to You under this License.
- c. If any provision of this License is invalid or unenforceable under applicable law, it shall not affect the validity or enforceability of the remainder of the terms of this License, and without further action by the parties to this agreement, such provision shall be reformed to the minimum extent necessary to make such provision valid and enforceable.
- d. No term or provision of this License shall be deemed waived and no breach consented to unless such waiver or consent shall be in writing and signed by the party to be charged with such waiver or consent.
- e. This License constitutes the entire agreement between the parties with respect to the Work licensed here. There are no understandings, agreements or representations with respect to the Work not specified here. Licensor shall not be bound by any additional provisions that may appear in any communication from You. This License may not be modified without the mutual written agreement of the Licensor and You.

Creative Commons is not a party to this License, and makes no warranty whatsoever in connection with the Work. Creative Commons will not be liable to You or any party on any legal theory for any damages whatsoever, including without limitation any general, special, incidental or consequential damages arising in connection to this license. Notwithstanding the foregoing two (2) sentences, if Creative Commons has expressly identified itself as the Licensor hereunder, it shall have all rights and obligations of Licensor.

Except for the limited purpose of indicating to the public that the Work is licensed under the CCPL, neither party will use the trademark "Creative Commons" or any related trademark or logo of Creative Commons without the prior written consent of Creative Commons. Any permitted use will be in compliance with Creative Commons' then-current trademark usage guidelines, as may be published on its website or otherwise made available upon request from time to time.

Creative Commons may be contacted at <http://creativecommons.org/>