eZ publish 2.2 Installation Guide

18th January 2002

Contents

Chapter 1

Introduction

> **"He who asks is a fool for five minutes, but he who does not ask remains a fool forever."**
> - Chinese proverb

eZ publish is a content management system, among a lot of other things. This installation manual will try to cover the job of installing eZ publish on your server.

Since version 2.2 eZ publish has a new possible way to be installed: without virtual hosts and mod_rewrite. This makes it possible for people, who don't have a dedicated server or a specialized eZ publish hoster, to install eZ publish on their accounts as long as they have PHP and a supported database (e.g. mySQL or PostgreSQL).

This opens some new options for installing:

If you have an account at a webhoster with PHP and mySQL, your option should be chapter 3, because you won't be able to install eZ publish as it's explained in chapter 2.

If you have a dedicated server with Apache and mySQL already running and you don't want to mess with the Apache configuration, then chapter 3 might be of interest of you.

If you have a dedicated server and want some help on how to install all needed software and eZ publish on it, then chapter 2 is for you.

1.1 Pre-Configured Hosting

It is possible to get pre-configured hosting services where you can install and manage your eZ publish site with ease. Read more about our hosting partners at eZ systems web site (`http://`ez.no/shop/hosting).

1.2 Pre-Configured Hardware

It is possible to order pre-configured hardware from eZ systems. You can order through or web shop (`http://`shop.ez.no).

A line starting with a hash-sign "#" are input from the user to the shell.

Chapter 2

Installing eZ publish (standard[1] method)

This chapter is mainly intended for installation on a Red Hat Linux system, but a lot of friendly people have contributed information for installation on other operating systems, take a look at chapter 2 and learn which systems those are.

Most of what is described here regarding Red Hat installation can also be applied to other installations, especially if your system uses RPM for installation. For other systems you would need to do a lot of compiling yourself to make this work, or apply the system's own package manager.

Finding packages can be done dirctly from vendor sites, though you might not be guaranteed that you'll find the package you need. In such instances you need to download the source directly from the software developer.

Different distribution sites for different Unix systems are:

- Debian (`http://www.debian.org/distrib/ftplist`)
- Mandrake, see chapter 2.9.
- IRIX (`http://freeware.sgi.com/`)
- Red Hat Linux (`http://www.redhat.com/apps/download`)
- SuSE Linux (`http://www.suse.com/us/support/download/index.html`)
- Sun (`http://www.sunfreeware.com/`)

The addresses to the software developers will be given where appropriated in the text.

You can also try "The Written Word" (`ftp://ftp.thewrittenword.com/packages/free/by-name/gcc-2.95.2/`) for binaries for Solaris 2.5.1, 2.6, 2.7/SPARC, 2.7/Intel, IRIX 6.2, 6.5, Digital UNIX 4.0D, HP-UX 10.20, and HP-UX.

2.1 Prerequisites

2.1.1 Needed Privileges

For the standard installation of eZ publish you will need to have the following privileges on your system:

[1] An alternative install method is described in chapter 3

- Access to Apache's httpd.conf for creating two virtual hosts and for enabling the rewrite engine and creating rewrite rules. This is absolutely necessary for eZ Publish at the moment.
- Access to compiler, only needed if you can't use any of the pre-compiled packages available. (You will have to install the gcc compiler on your system, see chapter 1 for a list of sites providing software for different Unixes.)
- Access to a shell (You must run certain scripts during installation, and sometimes for maintenance.)
- Access to cron jobs (Only needed if you want to use the eZ news feed module for regular updates of headlines imported from other sites.)
- Access to Apache's modules
- Access to a MySQL or PostgreSQL database
- You might also need the privilege to add new libraries to your system.

You might also use other web servers than apache, but then you're on your own since we haven't tested eZ publish on other configurations. If you do try another web server, please keep a log of what you do and submit it to us (pkej@ez.no) for inclusion in future versions of this manual.

2.1.2 Needed Software

You also need to download and install the following packages, if they aren't present on your system already:

- A database. Currently, eZ publish suppports MySQL (http://www.mysql.com) version 3.23 or later and PostgreSQL (http://www.postgresql.org) version 7.1.3 or later.
- ImageMagick (http://www.imagemagick.org/) newest version (Needed by eZ article, eZ image catalogue, and all modules using images. You need only the command line version.)
- Apache (http://httpd.apache.org/) latest 1.3 release. (It is always recommended to run the latest Apache release, though eZ publish shouldn't be very picky with the Apache versions. We've used eZ publish with Apache 1.3.13, some have reported that Apache 1.3.9 isn't useful.)
- mod_rewrite. This apache module is included in all recent versions of RedHat Linux. If you use an other distro, you may need to recompile apache with mod_rewrite
- Any and all modules you need for apache in addition to mod_php. (http://modules.apache.org/)
- PHP (http://www.php.net/) version 4.0.4pl1 or later. Version 4.0.6 is recommended. You need the source code version from this site, for windows you can just download the binary. (eZ publish uses references for objects and foreach loops. Only version 4.0.4pl1 and later supports both of these features satisfactorily.)
- eZ publish (http://developer.ez.no/) verision 2.0 or later stable releases.

The libraries and php are packaged pre-compiled for Linux i386 on http://developer.ez.no. The software is listed in the order of installation.

You should also find a list of RPMs at http://www.brandish.co.uk/phprpm

Important release note:

eZ publish version 2.2.2 does not require neither QDom or libxml as previosly releases did. In this release, eZ publish uses it own xml parser : eZ xml. Optioninal support for libxml will probably be reintroduced in a future version of eZ publish

2.1.3 Which Software is Already Installed?

2.1.3.1 Systems Using RPM

RPM is a system for distributing pre-compiled software. The packages also contain pre-configured settings and initialisation files, leaving almost nothing to the user, except deciding what to install.

To check if a package is available on your system you can run the following command (RPM based systems "rpm -qa | grep <name of program/library>". If you need to know where you can find the different files from that package you can follow up on the previous command with the following "rpm -ql <rpm name>". RPM name is one of the returned names from the previous command, example [2]:

```
# rpm -qa | grep libxml
libxml-1.8.7-80
libxmld-1.8.7-80
# rpm -ql libxml-1.8.7-80
/usr/bin/xml-config
/usr/lib/libxml.so.1
/usr/lib/libxml.so.1.8.7
/usr/share/doc/packages/libxml
/usr/share/doc/packages/libxml/AUTHORS
/usr/share/doc/packages/libxml/COPYING
/usr/share/doc/packages/libxml/COPYING.LIB
/usr/share/doc/packages/libxml/NEWS
/usr/share/doc/packages/libxml/README
/usr/share/doc/packages/libxml/TODO
```

2.1.4 Mandrake

First read chapter 2.9, then continue reading the manual from here.

2.1.5 IRIX

By accessing the software manager (you must be root) you can get a list of installed software, scroll or search that list to find the packages you're interested in. Double click on the tabs to the left to get information about where specific files are installed.

2.1.6 RAQ 3

There is a separate chapter 2.7 in this manual describing installation on a RAQ 3 server. It was kindly provided by Chris Mason,

2.1.7 Windows

Windows installation is described in its own chapter 2.8.

[2] A line starting with a hash-sign "#" are input from the user to the shell.

2.1.8 Other Systems

On other systems you should read the documentation for that system to learn how to find out what software is already installed.

You could try to use the command “find” to find the software. It is used thus: “find . -name *<program name>*” from the /usr/, /local/ , /lib/, /share/ directories. In extreme cases you could try from the root of the system, but this will take a long time and will also hog resources on your computer. Therefore we urge you to learn how to use the proper installation features of your system to find the software already installed.

2.1.9 Installation of Required Software

If you’ve found pre-compiled versions of all the software packaged for use with an installation tool, you just have to install that software using the tool. Instructioins for its usage is often found using the command “man <installation tool name>” or by reading your system’s documentation or the supplier’s website.

If you’ve had to download source code you will find instructions on how to compile and install the software you’ve downloaded at the software developer’s website. This requires a bit of knowledge and you should only undertake this if you feel confident about the job.

This manual will only cover configuration of the software needed and compilation of PHP to use the other software.

2.1.10 Important Notice

You should read all the README, INSTALL and similar files found with the software packages you download. They often contain tips on how to configure, compile and install the software on your system. It will save you a lot of time and aggravation if you follow instructions supplied with the software.

If problems arise during installation of the software, please turn to the suppliers support forums, mailing list archives and FAQs, your questions will often be answered there. If the supplier’s forums doesn’t seem to help you, you should check the support forums at our site.

You should always do a search of the forums before posting any questions.

2.2 Compile Configuration

2.2.1 PHP

Important : YOU NEED TO RECOMPILE PHP. No known Linux distros does yet have all the php features required by eZ publish. This means that you need to compile the php module from source.
You may find precompiled binaries for your system at the eZ publish web site, `http://developer.ez.no`. Take a look at the “Contributions” section in the download area.

2.2.1.1 Unpacking

After you have downloaded PHP you need to unpack it somewhere where you can compile and configure the software. To unpack run the command:

```
# tar zxvf php-4.0.x.tar.gz
```

Where the x is the version of php you’ve downloaded. Then you need to move into the directory you extracted php into:

```
# cd php-4.0.x
```

2.2.1.2 Configuration

You'll need either an apache module or a command line (CGI) version of PHP to use eZ publish on your website. We recommend you use PHP as an apache module. You will also need the command line version if you want to use the cron jobs for periodical updates of the eZ news feed module.

Thus for our recommended installation of PHP you need both the command line and module versions of PHP.

Common Both the command line and apache module versions need to have the following configurations added to the configuration tool:

–enable-trans-sid This lets PHP use session id's which don't rely on cookies. It does not disable normal cookie based sessions.
(http://www.php.net/manual/en/install.configure.php#install.configure.enable-trans-sid)

–with-mysql This tells PHP that the mysql functionality should be used.
(http://www.php.net/manual/en/install.configure.php#install.configure.with-mysql)

–disable-magic-quotes This tells PHP to disable magic quotes by default. you can also turn this feature on and off on a directory by directory basis in either the ".htaccess" files (if you use them) or in the setup of the virtual server in "httpd.conf".

IMORTANT : From version 2.1[3] onwards magic quotes must be turned off for eZ publish to work properly.
(http://www.php.net/manual/en/install.configure.php#install.configure.enable-magic-quotes)

–with-imap This configures PHP to include imap support. This is used by eZ mail module. This parameters require ssl support. Imap does also have bindings to kerberos. This causes some linking problems on RedHat Linux. The workaround for this problem is to type this command before you compile :

```
$ export LDFLAGS="-L/usr/kerberos/lib -lkrb5 -lgssapi_krb5 -lpam"
```

–with-openssl This will enable ssl support in PHP

You should also go through the web page: http://www.php.net/manual/en/install.configure.php and make sure that there isn't other functionality you would like to have included.

Command Line The default is to create a command line version of PHP. Therefore you don't need to add more configuration options for this.

Apache Module To build an apache module you need to add:

–with-apxs This compiles PHP as an apache module.
(http://www.php.net/manual/en/install.configure.php#install.configure.with-apxs)

Other Web Servers We haven't tested our software with other web servers than apache. If you need to try out other web servers, read this document http://www.php.net/manual/en/install.configure.php#install.configure.servers to learn how you configure for the web server you will be using.

[3] eZ publish versions prior to 2.1 required magic quotes to be enabled

Creating the Configuration Now you just have to run the "./configure" program with the appropriate configuration directives which we discussed in the preceeding sections, for an apache module you'd do the following:

```
   # ./configure --enable-trans-sid --with-mysql --enable-trans-sid --disable-magic-quotes
--with-imap --with-openssl
--with-apxs
```

Remember that to compile a script/cgi version you'd need to change that line to:

```
    # ./configure --enable-trans-sid --with-mysql --enable-trans-sid --disable-magic-quotes
--with-imap --with-openssl
```

2.2.1.3 Compilation

To compile you need to run the command "make":

```
    # make
```

2.2.1.4 Installation

To install your new PHP package you need to run the following command:

```
    # make install
```

2.2.1.5 Compiling the php module on RedHat 7.x, step by step

First download the source from www.php.net. You should get a file called something like
php-4.0.6.tar.gz

First, unpack the tarball:

```
$ tar -xzf php-4.0.6.tar.gz
```

Now, enter the source directory

```
$ cd php-4.0.6
```

Apply the kerberos workaround:

```
$ export LDFLAGS="-L/usr/kerberos/lib -lkrb5 -lgssapi_krb5 -lpam"
```

Run the configure script:

```
$ ./configure --with-apxs=/usr/sbin/apxs --enable-ftp --enable-trans-sid --with-config-file-
path=/etc/httpd --with-mysql=/usr --with-pgsql=/usr --enable-inline-optimization --with-ttf
--with-gd --enable-gd-native-ttf --with-imap --includedir=/usr --with-openssl=/usr --with-
zlib-dir=/usr --with-openssl=shared,/usr
```

Compile the module:

```
$ make
```

Install the module, either automaticly or manually.
Manually :

```
$ su
```

```
# cp .libs/libphp.so /usr/lib/apache
```

Automaticly:

```
$ su
# make install
```

Restart apache:

```
# /etc/rc.d/init.d/httpd restart
```

Verify that everything went OK.
Verify that apache was able to start:

```
# ps ax | grep httpd
```

Check the apache log

```
# tail -f 50 /var/log/httpd/error_log
```

IMPORTANT

When compiling php, please read chapter 2.6. Especially, take note of chapter 2.6.2.4. It might save you for hours with debugging

2.3 Apache Configuration

If you don't want to change the Apache configuration, go to chapter 2. Please take notice of the rewrite rules. They have been changed since the previously versions.

2.3.1 Dual Virtual Host

2.3.1.1 Configuring Through httpd.conf

This set up is based on having two different virtual hosts for your administration back-end and the main site. The main site would typically be known as "www.yoursite.com" and the administration would be "admin.yoursite.com"; the names are up to you, theoretically you could have different names, for example "mysite.yoursite.com" and "administration.mysite.com".

The virtual host is configured through the "httpd.conf" file which is the main configuration of Apache. Following is an example of such a host, modify it to reflect your own installation and preferences, but before that be sure to add the "NameVirtualServer" directive to the configuration file. The directive is "NameVirtualServer ip-address" where the ip address is the address where the server will receive requests (http://httpd.apache.org/docs/mod/core.html#namevirtualhost).

You should consider using the utility which we have online for creating the configuration. The URL is http://developer.ez.no/virtualhost it will generate a setup with the latest needed information. The presented configuration herein might be slightly outdated, so we recommend the online tool.

User Site

```
# User site
    <VirtualHost your.ip.addr.no>
      <Directory /your/docroot>
        Options FollowSymLinks
        AllowOverride None
      </Directory>
      RewriteEngine On


      RewriteRule .*/ezmediacatalogue/catalogue/(.*)$ /your/docroot/ezmediacatalogue/catalogue/$1 [T="application/oct-
stream",L]
```

```
      RewriteRule ^/stats/store/(.*).gif$  /your/docroot/ezstats/user/storestats.php [L]
      RewriteRule ^/filemanager/filedownload/([^/]+)/(.*)$  /your/docroot/ezfilemanager/files/$1 [T="application/oct-
stream",L]
      RewriteRule ^/xmlrpc.*$ /your/docroot/index_xmlrpc.php [L]
      RewriteRule !\.(gif|css|jpg|png|jar)$ /your/docroot/index.php
      ServerAdmin your.e-mail@address
      DocumentRoot /your/apache/documentroot/publish_dist
      ServerName your.domain.com
    </VirtualHost>
```

Admin Site

```
# Admin site
  <VirtualHost your.ip.addr.no>
    <Directory /your/docroot>
       Options FollowSymLinks
       AllowOverride None
    </Directory>
    RewriteEngine On
   RewriteRule .*/ezmediacatalogue/catalogue/(.*)$ /your/docroot/ezmediacatalogue/catalogue/$1 [T="application/oct-
stream",L]
    RewriteRule !\.(gif|css|jpg|png|jar) /your/docroot/index_admin.php
    ServerAdmin your_mail@domain.no
    DocumentRoot /your/apache/documentroot/publish_dist
    ServerName admin.yourdomain.org
  </VirtualHost>
```

The format of the "httpd.conf" file is covered at http://httpd.apache.org/docs/ for a complete understanding of the above information you'll need to read that documentation.

The directory "/your/docroot/" is the directory where you extracted eZ publish.

Error Checking You can check that everything is correct with your rewrite rules by running "apache -s", which will check for virtual hosts. There should also be an error log (consult the apache documentation) which you can read to check for errors.

Explanation of the Rewrite Rules A rewrite rule contains three arguments. The third argument is optional. The first argument describes a (reg exp[4]) pattern which is applied to the URI. If the URI match the regular expression, the URI is substituted with the second argument . A last argument can be used to give mod_rewrite special flags so that it's behaviour will differ from the default. The syntax for a rewrite rule can be written in this general form:

```
RewriteRule Pattern Substitution [FLAGS]
```

The rewrite rules for eZ publish do the following:

```
RewriteRule .*/ezmediacatalogue/catalogue/(.*)$ /your/docroot/ezmediacatalogue/catalogue/$1
[T="application/oct-stream",L]
```

This rewrite rule states that every URLs containing the string "`/ezmediacatalogue/catalogue/`" shall be served from "`/your/docroot/ezmediacatalogue/catalogue/`". The "`.*`" means zero or more characters of any type. When this is written in parenthesis like at the end of the argument, these characters in inserted in the variable $1. The result of this is that the filename is inserted into the variable $1. The trailing $ in the pattern argument is a special meaning in a regular expression. It is the a symbol for the end of the line. In the substitution argument, the content of variable $1 is then appended to the path "`/your/docroot/ezmediacatalogue/catalogue/`" so that the correct file is served.
An result of this rewrite rule is that a file in the mediacatalog will be served independet if which user is logget on. Permissions on the media file will not checked if the user knows the filename. This will be fixed

[4] For an introduction to regular expressions, take a look at http://zez.org/article/articleview/11/

in a later version of eZ publish.

```
RewriteRule ^/stats/store/(.*).gif$  /your/docroot/ezstats/user/storestats.php [L]
```

This says that everything served from "/stats/store/" should be served by the storestats.php script. This is used by the statistical module

```
RewriteRule ^/filemanager/filedownload/([^/]+)/(.*)$  /your/docroot/ezfilemanager/files/$1 [T="application/oct-stream",L]
```

This says that everything served from "/filemanager/filedownload/" should be redirected to fetch information from "publish_dist/ezfilemanager/files". In other words, when people downloads a file from the filemanager, the file is served from the directory specified in the second part.

The "^" just after "RewriteRule" says that evertything which starts with this, in other words it is a start of line marker. When working with an URL that is from the root of your site, ie. the part from the first slash after your domain name.

The "$" sign is used to mark the end of line, in order to remember the full line.

The part `"[T="application/oct-stream",L]"` means that everything which is matched shall be of the specific mime type ("application/oct-stream", ie. binary download). The ",L" part means stop the rewrite process and don't apply any more rewrite rules if this rewrite rule matches .

```
RewriteRule ^/xmlrpc.*$ /your/docroot/index_xmlrpc.php [L]
```

This rewrite rule is required if you want to connect to your eZ publish site with eZ publish Desktop Edition. eZ publish Desktop Edition is a GUI client for Linux and Windows. With this application you can edit articles in a WYSIWYG environment, no need to remember the different tags.

The last rewrite rule

```
RewriteRule !\.(gif|css|jpg|png|jar)$ /your/docroot/index.php
```

is found in both sites (admin and user). This means that every file, except gif, css, jpg and png (and files matched against the previous rule when in the user site) should be redirected to the file in the second part, ie. the index.php or index_admin.php file. The reason for this is that we don't want anyone trying to get direct access to anything which might be sensitive, or revealing about the site's operation.

If you compiled PHP with magic quotes; or other software relies on PHP using magic quotes you can add the following line into each virtual host section:

```
php_flag magic_quotes_gpc off
php_flag magic_quotes_runtime off
```

2.3.1.2 Configuring php.ini

Magic quotes may also be turned of in php. This will disable magic quotes:

```
magic_quotes_gpc = Off
magic_quotes_runtime= Off
```

2.3.1.3 Configuring Through .htaccess

At present, configuring the rewrite rules in .htaccess files is not supported. However, you may switch of magic quotes in an .htaccess file.

Note: You must set up apache to accept this.

User Site In your document root (/path/to/index.php/) create a file called ".htaccess" containing the following text:

```
php_flag magic_quotes_gpc off
```

2.4 eZ publish Installation

2.4.1 Program Files

The next step is 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're running. You'll 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'll 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
```

2.4.2 Database

Some people might prefer to use phpMyAdmin (http://www.phpwizard.net/projects/phpMyAdmin/) for most of this part; we can not help you with installation of that program, though.

2.4.2.1 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 pleases you.

```
# 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
```

Adding Pre-Defined Data If you want to add the pre-defined data of the distribution you shouldn't 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[5] to make sure that everything presented is cached correctly:

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

2.4.2.2 PostgreSQL configuration

Important note regarding PostgreSQL support in eZ publish:
PostgreSQL has one limitation which is not good for eZ publish:
Max length of indentifiers used in the database, table names, column names etc is default set to 32.
eZ publish uses names which sometimes are longer, e.g: eZImageCatalogue_ImageVariationGroup
Therefore you need to recompile PostgreSQL to support a larger value by altering:

#define NAMEDATALEN 64

in the file : src/include/postgres_ext.h

2.4.2.3 PostgreSQL setup

On last configuration change is necessary. This will allow TCP-IP connections to the database, not only unix sockets.
In pqsql-root/data/postmaster.opts (for instance /var/lib/pgsql/data/postmaster.opts) you need to apply a "-i" parameter. The content of the file will then be like this:

```
/usr/bin/postmaster '-D' '/var/lib/pgsql/data/' '-i'
```

2.4.2.4 First time installation (PostgreSQL)

Login as user postgres

```
# su - postgres
```

Create a database

```
$ createdb publish
```

Create a dabase user

```
$ createuser publish -W
```

Create tables

[5] A new feature in eZ publish 2.2 is the possibility of clearing the cache from the admin site

```
$ psql -Upublish <sql/data_mysql.sql
```

You also need to enable PostgreSQL in site.ini. Change the" DatabaseImplementation" configuration so it reads:

DatabaseImplementation=postgresql

2.4.2.5 Updating the Installation

This section is for users who are updating from a previous version of eZ publish. There should be several files ending with ".sql" in the directory "updates". Run the files needed to update your version to the current. You need to apply all the updates for every version since your version.

2.4.3 Setting up the cronjob job

eZ publish has a crontab script.

In order to edit your crontab, type :

```
$ crontab -e
```

You will then be editing a file in a text editor (which editor is dependend on your system configuration). In this file add the following line

```
0 23 * * * cd /your/docroot; /usr/bin/php cron.php
```

Now, save and exit the text editor

Please replace "/your/docroot" with your real document root.

2.5 Now What?

After installing eZ publish you can test your site through the URL `http://www.yoursite.com/` and you can administrate 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.

The next manual you should read is the "eZ publish Customisation Guide", it tells you how to configure the software to use the functionality you want, as well as how you change the templates to suit your needs.

When you're finished with the design and the initial testing you can head over to `http://zez.org/` for articles about community building as well as programming, or you can visit `http://developer.ez.no` for updates, articles about eZ publish and how to work with it, as well as keeping abreast of new developments.

2.5.1 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 etc. 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 have 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 immediatly.
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

2.6.1 Problems During Installation

2.6.1.1 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 Linux distro/unix system. In the introduction (see chapter 1) it listed 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.

2.6.1.2 I am getting linking errors when trying to build PHP

The PHP module you have compiled will be linked agains kerberos. This causes some linking problems on RedHat Linux. The workaround for this problem is to type this command before you compile :

```
$ export LDFLAGS="-L/usr/kerberos/lib -lkrb5 -lgssapi_krb5 -lpam"
```

2.6.2 Problems After Installation

2.6.2.1 Permission Denied

```
Warning:  fopen("site.ini","r+")
Permission denied in classes/INIFile.php on line 80
```

If you get this error message you need to run the "modfix.sh" script.

2.6.2.2 Can not see Images

ImageMagick is not working, make sure that it is working by using the command line command "convert".

2.6.2.3 Warning about Temp Directory

If you get any such warning you need to set the temp directory in php.ini.

2.6.2.4 After installing my new php module, apache dies immediately.

RedHat as released new versions of the openssl packages for RedHat 7.x[6]. If these erratas is installed before you compile php, your php module will be linked agains these. This will however brake mod_ssl, which is linked to the old openssl libraries. There are two different ways to fix this:
Uninstall mod_ssl:

rpm -e mod_ssl

Or you may download the apache source rpm from redhat. Then recompile and install it.

If this doesn't help, look for clues in /var/log/httpd/error_messages

2.7 Installing on RAQ 3

Installing ezPublish on raq3 without messing up the GUI or voiding the warranty.

This is untested by eZ systems, and we provide this "as is" without any form of guarantee or endorsement, either explicitly or implicitly.

First, add the domain into the DNS, but do not create a virtual site.

Log in by telnet (install SSH unless you are desperate to get hacked).

Put the publish files in the directory you want to use, I used /home/sites/extrasites/mysite/web

Install mysql 3.23 or later by rpm, there is one out there. MySQL (http://www.mysql.com) version 3.23 or later if you want to compile

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

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

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.sql
```

Then get:

- http://www.freesoftware.com/pub/infozip/zlib/ (zlib.tar.gz)
- http://www.boutell.com/gd (gd-1.8.4.tar.gz)
- ftp://ftp.uu.net/graphics/jpeg/jpegsrc.v6b.tar.gz (jpegsrc.v6b.tar.gz)
- http://www.php.net (php-4.0.4pl1.tar.gz)

Delete all gd.h files on your system. You can find them using:

[6] The problem described here may only apply to RedHat 7.0

```
# find / -name gd.h
```

If there are more than one, then delete all of them.
Now add the following line to the /etc/ld.so.conf file:

```
/usr/local/lib
```

Save the file, and run:

```
# /sbin/ldconfig
```

This was an important part, because Apache needs this dir to find the correct modules.
Extract the zlib archive:

```
# tar -zxvf zlib.tar.gz # cd zlib-1.1.3
```

And install it:

```
# ./configure --shared
# make
# make install
```

Now install the JPEG-6b, doing the following:

```
# tar -zxvf jpegsrc.v6b.tar.gz
# cd jpeg-6b
# ./configure --enable-shared
# make
# make install
```

Install the PNG library

```
# wget http://www.libpng.org/pub/png/src/libpng-1.0.9.tar.gz
```

Then compile the package.
Get Imagemagick ImageMagick (http://www.imagemagick.org/) newest version Download and then:

```
# tar -zxvf Imagemagick-xxx
# cd Imagemagick-xxx
# ./configure
# make
# make install
```

Then go one directory back, and extract the GD archive using:

```
# tar -zxvf gd-xxx
# cd gd-xxx
```

Now edit the Makefile (using vi or pico) and check which modules you want. I removed the Freetype Library (-DHAVE_LIBFREETYPE / -lfreetype). After making the changes save the file and go back to the shell. Now compile GD:

```
# make
# make install
```

If this is giving any errors, just remove the modules you don't have (but don't remove the JPEG lib - we need that one ! :)))

Now go back one dir, and extract PHP4:

```
# tar -zxvf php-4.0.4pl1.tar.gz
# cd php-4.0.4pl1
```

First remove any cache:

```
# rm config.cache
# make clean
#./configure --with-mysql \
--with-apxs=/usr/sbin/apxs \
--with-system-regex \
--with-zlib \
--enable-safe-mode \
--with-gdbm \
--enable-sysvsem \
--with-ftp \
--with-config-file-path=/etc/httpd/conf/ \
--with-exec-dir=/usr/sbin/httpd \
--enable-trans-sid
# make
# make install
```

run /sbin/ldconfig again.

Apache: (Your milage may vary, be wary of paths)

edit /etc/httpd/conf/httpd.conf and add the Loadmodules lines like this:

```
# Extra Modules
LoadModule php_module modules/mod_php.so
LoadModule php3_module modules/libphp3.so
LoadModule perl_module /usr/lib/apache/libperl.so
LoadModule php4_module /usr/lib/apache/libphp4.so
LoadModule php4_module lib/apache/libphp4.so
```

Reconstruction of the complete module list from all available modules

(static and shared ones) to achieve correct module execution order.

[WHENEVER YOU CHANGE THE LOADMODULE SECTION ABOVE UPDATE THIS, TOO]

```
ClearModuleList
# Extra Modules
AddModule mod_php.c
AddModule mod_php3.c
AddModule mod_perl.c
AddModule mod_php4.c
```

Add the second line below line below the rewrite stuff, above the <Virtualhost> directives.

NameVirtualHost 216.97.67.4 Include /etc/httpd/conf/extrasites.conf <VirtualHost 216.97.67.4>
create this include file and in it put the apache vitual server directives for your site.
For example:

```
    # User site
    <VirtualHost yourIP>
      ServerName yourdomain.org
      ServerAlias www.yourdomain.org
      <Directory /your/site/root/>
        Options FollowSymLinks
        AllowOverride None
      </Directory>
      RewriteEngine On
       RewriteRule ^/stats/store/(.*).gif$  /your/site/root/ezstats/user/storestats.php [L]
       RewriteRule ^/filemanager/filedownload/([^/]+)/(.*)$  /your/site/root/ezfilemanager/files/$1 [T="application/oct-
stream",L]
       RewriteRule .*/ezmediacatalogue/catalogue/(.*)$ /your/docroot/ezmediacatalogue/catalogue/$1 [T="application/oct-
stream",L]
       RewriteRule ^/xmlrpc.*$ /your/docroot/index_xmlrpc.php [L]
       RewriteRule !\.(gif|css|jpg|png|jar)$ /your/site/root/index.php
      ServerAdmin your_mail@domain.no
      DocumentRoot /your/site/root/
    </VirtualHost>

    # Admin site
    <VirtualHost admin.yourdomain.org>
      <Directory /your/site/root>
        Options FollowSymLinks
        AllowOverride None
      </Directory>
      RewriteEngine On
       RewriteRule ^/filemanager/filedownload/([^/]+)/(.*)$  /your/site/root/ezfilemanager/files/$1 [T="application/oct-
stream",L]
RewriteRule .*/ezmediacatalogue/catalogue/(.*)$ /your/docroot/ezmediacatalogue/catalogue/$1 [T="application/oct-
stream",L]
       RewriteRule !\.(gif|css|jpg|png|jar) /your/site/root/index_admin.php
      ServerAdmin your_mail@domain.no
      DocumentRoot /your/site/root
      ServerName admin.yourdomain.org
      ServerAlias admin.yourdomain.org
    </VirtualHost>
```

restart apache:

```
    # /etc/rc.d/init.d/httpd stop
```

wait a few seconds then

```
    # /etc/rc.d/init.d/httpd start
```

Then chown httpd.httpd * on both the domain and admin.domain directories to get it to work.
If all is well, your site should work.

2.7.1 Getting SSL to Work

This is a bit tougher! Enable SSL for the site in your GUI. Generate your certificates. Disable SSL in the GUI. Add this to the end of your extrasites.conf

```
#attempt to modify
SSL Listen xxx.xxx.xxx.xxx:443
<VirtualHost xxx.xxx.xxx.xxx:443>
    ServerAdmin ubong
    DocumentRoot /home/sites/yoursite/web
    <Directory /home/sites/yoursite/web>
        Options FollowSymLinks
        AllowOverride None
    </Directory>
    SSLEngine on
    SSLCertificateFile /home/sites/yoursite/certs/certificate
    SSLCertificateKeyFile /home/sites/yoursite/certs/key
    AddHandler server-parsed .shtml
    AddType text/html .shtml
    AddHandler cgi-wrapper .cgi
    AddHandler cgi-wrapper .pl
    RewriteEngine On
    RewriteRule !\.(gif|css|jpg|png)$ /home/sites/public.edge.ai/web/index.php
    ErrorLog /home/sites/yoursite/logs/error_log
    TransferLog /home/sites/yoursite/logs/access_log
</VirtualHost>
```

This should work. IF you can't get it, give me an email and I'll help if I have time: chris@net.ai

2.8 Installing on Windows

This information is contributed by Marco Zinn for the 2.1.0 release, so it might be slightly outdated. This is untested by eZ systems, and we provide this "as is" without any form of guarantee or endorsement, either explicitly or implicitly.

2.8.1 Requirements and notes

In order to install ezPublish on a windows system, you need to download and install

- the apache webserver
- php4
- MySQL database server
- phpMyAdmin (optional, but I recommend it over using mySQL from the command line)
- Imagemagick

If you already have installed all this, you may skip to the next section and go and install ezPublish.

Note that this installation was done on a windows 98 second edition system with ezPublish 2.1. For Windows NT and 2000 you may to do some more or other settings, because of the access rights situation (file permissions in the file system) and the possibility to run services independant from a user being logged in. If you have the choice, do not use a windows system for a production system! I'm using this just for development purposes on my laptop.

I will describe the installation steps and show some small tests to see if all went fine. Of course you will need (root) access to the system if you need to install anything.

If you have never installed and configured software using text files, you might run into trouble setting this up. You need to install a web server, a database server, some tools and the ezPublish application itself. It's not that hard, but it is more than clicking on a big "Install" button.

The installation guides are partially copied from the install texts of the software packages. You should read the full documentation for a specific software, if you run into trouble or have any problems with my notes.

2.8.2 Apache

Get the win32 binary of the Apache webserver version 1.13.19 from http://www.apache.org/

Note that the binary is a MSI Binary Distribution Package and you need the MSI installer application in order to install this package. Users of Windows NT 4.0, 95 and 98 must download the MSI installer from the website, if it was not already installed by another product's installation.

When installing apache, have your network domain ready and choose a nice name for your new webserver. If you plan to use the webserver for more than just ezPublish (ie: phpMyAdmin, browsing the apache docs, ...), you should choose a server name that is independant from the host names of the ezPublish installation later.

If you just set this up on a stand-alone PC or a small network, you could use my.intranet as the network domain and apache.my.intranet as the server name. You need to choose an email adress for the server admin.

Start the installer and choose to run apache as a service, if you like. Choose "Complete Install" and change the destination folder to "C:\". This will install apache in C:\apache and the documents will be in C:\apache\htdocs (=docroot).

Your apache now needs to be told to use the rewrite module, so we can use the rewrite rules later. Open C:\Apache\conf\httpd.conf with your wordpad (I recommend to create a shortcut on the desktop to this file). Remove the comment sign "#" from the line "LoadModule rewrite_module modules/mod_rewrite.so" and save the file.

Error Checking Apache:

Start Apache from the menu or make a shortcut to C:\apache\apache.exe on the desktop (recommended) and double-click. If all went fine, a DOS box should pop up and show "Apache/1.3.19 (Win32) running....".

Fire up your webbrowser on this machine and open http://localhost/ . This should display a welcome page with a link to the apache docs.

Stop Apache by selecting (focussing) the DOS box window again and pressing CTRL-C (takes some seconds).

2.8.3 PHP4

Get the PHP4 windows binary from http://www.php.net/. I used PHP 4.0.4.pl1. You need a binary version with a server API version for apache, as we will use PHP as an apache module.

Extract the zip file to C:\php, using folder names. Now move php4ts.dll to the C:\windows\system directory.

Stop the Apache Webserver, if it is running. Edit the httpd.conf and put in these lines:

```
# for the apache module
LoadModule php4_module c:/php/sapi/php4apache.dll
AddType application/x-httpd-php .php .php3

<IfModule mod_dir.c>
    DirectoryIndex index.html index.php index.php3
</IfModule>
```

The AddType line might be already in there (search for "PHP 4"), be sure to remove the "#". The LoadModule line should be created below the other LoadModule lines.

This will load the PHP4 module, when apache is started and link .php and .php3 files to the PHP module. The expansion of the DirectoryIndex entry (which already is in the config file) is not be necessary for ezPublish. Adding index.php and index.php3 just makes life with php tools easier.

Copy the php.ini-dist from C:\PHP to C:\windows, rename it to php.ini, and edit the php.ini to fit your needs. You will need at least these entries:

```
magic_quotes_gpc        =       Off
extension_dir   =       C:\php\extensions
session.save_path         = C:\windows\temp
```

Magic Quotes must be off for ezPublish 2.1. You also must enable this libary by removing the comment sign '#' in its line. The savepath must be set to some local directory for temporary files.

Restart the Apache server. If all is fine, it should display "Apache/1.3.19 (Win32) PHP/4.0.1pl1 running..." now.

Error Checking PHP and Apache:

Create a text file called test.php in C:\apache\htdocs.

The file must contain:

```
<?
phpinfo();
?>
```

Save the file and open it via http://localhost/test.php. This should display some information about your PHP. If your webbrowser display the contents of the file or prompts you save the file somewhere, the PHP integration did not work.

2.8.4 MySQL

Get the standard binary (tarball) distribution for Windows 95/98/NT/2000 for intel from www.mysql.com. I'm running version 3.23.35a here, but newer versions should be available.

Extract the file to some temporary dir and run the setup. Install to C:\MySQL using "Typical Install".

Create a shortcut to C:\mysql\bin\winmysqladmin.exe on your desktop and run it. At the very first start, a "Quick Setup" window should pop up. Enter a username and a passwort for the MySQL Server access. Use "publish" for both user name and password to simplify the rest of the installation. This will create the my.ini file in C:\windows

There should be a traffic light in the system tray (left of the time display). It should go green now.

Right-click on the traffic lights, select "Show me" from the pop-up menu. Go to "my.ini setup", and "pick-up and edit my.ini values". Choose the server you want to use; probably mysqld-nt on NT and mysqld-opt on Win9x (using the radio buttons). Choose "Save Modification"

If you want to load mysql on startup, choose 'Create ShortCut on Start Menu'. Note that you might have to put a link to apache.exe in the startup menu group, too, if you want the whole system to run at startup

Right-Click on the traffic lights, Choose "Win9x "-> "Shutdown Both" in order to stop the database server and the WinMySQLAdmin tool.

Error Checking MySQL:

Restart the database server by starting WinMySQLadmin: a window should show up and minimize to tray. The Traffic lights should go green. This means that the MySQL daemon (server) is up and running, using your new my.ini values.

2.8.5 phpMyAdmin

In order to have some kind of nice interface to your MySQL database server and in order to access its databases and tables, you should install phpMyAdmin. I rely on it later, when installing ezPublish. Note that using phpMyAdmin without further security measurements is always some sort of security risc, because it allows access to your valuable databases through a web browser.

Get phpMyAdmin from http://www.phpwizard.net/ . Select the zip version with php extensions. I'm using version 2.1.0.

Extract the zip-file to your document root, using folder names. This puts phpMyAdmin to C:\apache\htdocs\phpMyAdmin.

Error Checking phpMyAdmin and MySQL:

Note that this test seems to work only, when your default server (apache.my.intranet) is already translated to the right IP adress. See "2.8.7 Determing and publishing your host names" on how to do this or do this test later.

When Apache and MySQL servers are running, fire up your browser and open http://localhost/phpMyAdmin . This should show the UI of phpMyAdmin and allow you do browse a bit in two MySQLs databases. "test" is a test-database, while "mysql" is the MySQL database itself, containig users and access rights etc. You should not mess to much with this, but you should be able to find a user called "publish" in the user table. This one is necessary for further installation of ezPublish.

Also beware that "drop" means "delete"!

2.8.6 ImageMagick

Get the ImageMagick windows binary (ImageMagick-win2k.zip) from www.imagemagick.org and extract it to C:\, using folder names. This installs ImageMagick to the C:\ImageMagick-win2k directory.

Now specify in the site.ini where to find the convert program of ImageMagick. In site.ini change the ImageConversionProgram line to read

```
ImageConversionProgram=C:\ImageMagick-win2k\convert.exe .
```

This works great for me. The readme of ImageMagick tell you to use environment variables. If you want to try this, add the following lines to your autoexec.bat, save and reboot:

```
set MAGICK_HOME=C:\ImageMagick-win2k
```

```
set PATH=C:\ImageMagick-win2k
```

If you already have set a the PATH variable, you have to expand your path by the ImageMagick application directory.

Error Checking ImageMagick:

Note that you can do this test only, when you have set up and configured ezPublish completely, that is after 2.8.10. In order to test ImageMagick, log in to the admin site, choose the article module, choose to create a new article, type some text and click on the [images] button. On the next screen click [Add Image] and upload some graphic file. ImageMagick works, when you see a thumbnail of the image you just uploaded. Try this with the common graphic formats (JPG, PNG, GIF).

2.8.7 Determing and publishing your host names

For ezPublish, you need two virtual hosts, one for the user site, the other for the admin site. You should make up your mind on how you want to call these now. They should be different from the apache (default) server name.

If you called your apache (default) server apache.my.intranet, you might want to call your ezPublish hosts something like ez.my.intranet and ezadmin.my.intranet.

In order to have ezPublish running, you need to translate these host names to the IP-Adress of the system the apache server is running on.

If you are using a stand-alone PC, take 127.0.0.1 as your IP adress. Using a LAN, you will find your IP with the tool ipconfig (run in a DOS box). If you are using a small private LAN, your IP might be something like 192.168.xxx.xxx.

A company LAN probably will use a Domain Name Server (DNS). If that's the case, contact your network admin for inserting the new host names.

All others (including stand-alone PCs) must use the hosts file: If you did not use this file yet, copy the hosts.sam sample file to hosts (without extension). hosts files are in your windows directory.

Open the hosts file with your notepad.

If your are using the "localhosts" IP adress 127.0.0.1, enter the following lines:

```
127.0.0.1       localhost
127.0.0.1       apache.my.intranet
127.0.0.1       ez.my.intranet
127.0.0.1       ezadmin.my.intranet
```

This links all the used host names to the IP adress 127.0.0.1. When using a small LAN, use your detected IP adress instead of 127.0.0.1 in the last three lines (leave localhost as it is) and make sure to make this hosts entries on any client system, from which you want to access your webserver and ezPublish later (that probably is any PC in the LAN).

Note that you do have to restart windows or the servers in order to take the changes in the hosts file to take effect.

Error Checking hosts settings:

Open you webbrowser and load http://apache.my.intranet. The browser should show the apache welcome screen. Repeat this for every host name you just entered (ez.my.intranet and ezadmin.my.intranet) and for every client.

2.8.8 ezPublish 2.1

Unpacking the files

Extract the ezpublish file to C:\Apache\htdocs\ , using folder names. This will give you all files in C:\Apache\htdocs\ezpublish_2_1. Put createdirs.bat in C:\Apache\htdocs\ezpublish_2_1 and run it. This creates the cache directories. If your did not uses publish/publish as your MySQL user/password settings, open site.ini, and just change the user and password lines to match your settings.

Error Checking:

While apache and MySQL servers are running, open http://localhost/ezpublish_2_1 in your webbrowser. This should give you an "could not connect to database ... no database selected".

That's fine. It shows that PHP ran the index.php of the ezPublish installation and tried to connect to the database server. Connecting to the server was okay, but the database "publish" could not be found, as we did not yet create it.

2.8.9 Creating the database

Open http://apache.my.intranet/phpMyAdmin in your webbrowser. Create a new database named "publish".

Run a SQL query and choose to load it from a textfile. Browse to C:\apache\htdocs\ezpublish_2_1\sql\publish.sql and confirm with "Go". This should take a while as the tables are created and some data is inserted. Check the first line, if the execution of the SQL query was successful.

Error Checking:

In your webbrowser, open http://apache.my.intranet/ezpublish_2_1. This should give you nearly the known ezPublish screen.

Note that you cannot access the admin site yet and the user site will not work very much (links, missing graphics etc). We have not yet set the virtual hosts. But we will now.

2.8.10 Virtual hosts and rewrite rules

I will give you a quick sample, how to set up apache to use virtual hosts and rewrite rules as we need them for ezPublish to work.

A good explanation of the virtual host and rewrite rule concept is in chapter 4 of the installation guide (Apache configuration) and of course in the apache documentation itself.

Open your httpd.conf and search for "NameVirtualHost". You need to enable VirtualHosts using the NameVirtualHosts directive and create three virtual hosts. The first is the default host for this web server, second is the ezPublish user site, third is the ezPublish admin site. You can omit the first, if you are just

running ezPublish on the system, but you will not be able to access phpMyAdmin, the apache documentation or anything else then.

Copy these lines into httpd.conf and save. If you did not follow my suggestions for folder names of apache and for the host names, you need to make the appropriate changes here.

```
#
# Use name-based virtual hosting.
#
NameVirtualHost apache.my.intranet

# Server default site (default server)
<VirtualHost apache.my.intranet>
DocumentRoot C:/Apache/htdocs
ServerName apache.my.intranet
</VirtualHost>


# ezPublish User site
<VirtualHost ez.my.intranet>
<Directory C:/Apache/htdocs/ezpublish_2_1>
  Options FollowSymLinks Indexes ExecCGI
  AllowOverride None
</Directory>

RewriteEngine On
#RewriteLog rewrite_user.log
#RewriteLogLevel 9
RewriteRule ^/stats/store/(.*).gif$ /ezstats/user/storestats.php [S=3]
RewriteRule .*/ezmediacatalogue/catalogue/(.*)$  /var/www/publish/ezmediacatalogue/catalogue/$1
[T="application/oct-stream",S=2]
# The lines above should appear on the same line in your configuration file!
RewriteRule ^/filemanager/filedownload/([^/]+)/(.*)$
/ezfilemanager/files/$1 [T="application/oct-stream",S=1]
# The lines above should appear on the same line in your configuration file!
RewriteRule !\.(gif|css|jpg|png)$ /index.php

DocumentRoot C:/Apache/htdocs/ezpublish_2_1
ServerName ez.my.intranet
</VirtualHost>


# ezPublish Admin site
<VirtualHost ezadmin.my.intranet>
<Directory C:/Apache/htdocs/ezpublish_2_1>
  Options FollowSymLinks Indexes ExecCGI
  AllowOverride None
</Directory>

RewriteEngine On
#RewriteLog rewrite_admin.log
#RewriteLogLevel 9
```

```
RewriteRule .*/ezmediacatalogue/catalogue/(.*)$  /var/www/publish/ezmediacatalogue/catalogue/$1
[T="application/oct-stream",S=1]
RewriteRule !\.(gif|css|jpg|png)$ /index_admin.php

DocumentRoot C:/Apache/htdocs/ezpublish_2_1
ServerName ezadmin.my.intranet
</VirtualHost>
```

You can check your VirtualHost configuration by running apache -S from the command line. If you are having trouble with the rewrite rules, you can enable the RewriteLog directives for a time for debugging.

Error Checking:

In your webbrowser, open http://ez.my.intranet. This should give you the ezPublish screen. Graphics should be there, links should be working, although there is no content in the database yet. We will add some in a minute.

You can access the admin site through http://ezadmin.my.intranet. You can log in using "admin" as a user and "publish" as the password.

2.8.11 Sample data

In order to have something to play with, you may want to insert some sample data.

Expand the data.tar.gz file to C:/Apache/htdocs/ezpublish_2_1, using folder names. This will create some image files and some downloads for the sample data.

Now we need to insert the data itself into the database. Therefore open http://apache.my.intranet/phpMyAdmin, select the database "publish" by clicking on it in the left frame, scroll down past the list of tables in the right frame and run a SQL query. Choose to load it from a textfile. Browse to C:\apache\htdocs\ezpublish_2_1\sql\data.sql and confirm with "Go". Again check the first line, if the execution of the SQL query was successful.

This is just the same procedure like the first-time-creating of the database (see 1.3.2), only with data.sql instead of publish.sql.

Error Checking:

In your webbrowser, open http://ez.my.intranet. This should give you the ezPublish screen, now with sample articles.

2.8.12 eZ publish and IIS

Not very much information is available for this webserver. We have however received reports that since IIS does not have a mod_rewrite module you may use this hack [7] instead:

IIS Configuration:

- Create the virtual hosts for IIS. (only tested on win2000)

(here comes the not so elegant part)

[7] Since eZ publish now can be run without mod_rewrite you may take look at chapter 3 as it may provide you with a better solution

- In the virtual hosts config for the user site, change the custom errors [8] for 404 and 405 to:
  Message type: URL
  URL: /index.php
- In the virtual hosts config for the admin site, change the custom errors for 404 and 405 to:
  Message type: URL
  URL: /index_admin.php

(if you encount 500-err you may need to reboot the server, Uhhh.. I love MS,
it gives me a lot of cofee brakes. eZPublish runing on IIS is unstable)

2.9 Mandrake

Thanks to Mark Polsen for giving us this information.

This is untested by eZ systems, and we provide this “as is” without any form of guarantee or endorsement, either explicitly or implicitly.

2.9.1 Download the Following

Download what you need from `http://developer.ez.no/filemanager/list/23/` and install the rpms!

That’s all; read the manual from the start after that, and install eZ publish as described.

[8] The eZ publish developers want to point out that this does NOT seem to be a secure workaround. This workaround should not be used in an environment where the server might be exposed to untrusted users (i.e the internet)

Chapter 3

Installing eZ publish without virtual hosts and mod_rewrite

Installing eZ publish this way has several advantages:

- no root rights needed
- no virtual/dual hosts or mod_rewrite needed
- no subdomains needed
- no change of Apache configuration needed
- installation in subdirectories possible
- you can keep your old documents on the server

The disadvantages are:

- the URLs will be "[...]/index.php/article/articleedit/[...]" instead of "[...]/article/articleedit/[...]"
- new feature in 2.2, so it's not as well tested as normal dual hosts install

3.1 Prerequisites

The following software must be running on your server and you must have permissions to use it:

- PHP (`http://www.php.net`) version 4.0.4pl1 or later.
- A supported database:
  - MySQL (`http://www.mysql.com`) version 3.23 or later
  - PostgreSQL (`http://www.postgresql.org`) version 7.1.3 or later

The following software is optional, but required for some modules of eZ publish:

- ImageMagick (`http://www.imagemagick.org`) newest version (Needed by eZ article, eZ image catalogue, and all modules using images. You need only the command line version.)

3.2 eZ publish installation

3.2.1 Installing in one directory (Recommended install)

3.2.1.1 Installing the files for eZ publish

1. Extract the eZ publish files (if you want some example data, extract `data.tar.gz` too) and if they are not on the server yet, transfer them to the server in a directory of your choice.
   (example: `/home/userA/ezpublish` reachable by `http://www.yourserver.com/ezpublish`)
2. Copy `installation/htaccess-nVH` to `.htaccess` in the top directory of your eZ publish installation.
   (example: `/home/userA/ezpublish/.htaccess`)
3. Edit the file `sitedir.ini` and set the right directory.
   (example: `/home/userA/ezpublish/`)

3.2.1.2 Database installation

If you have shell access to create the database, see section 2.4.2.

1. Create a database (e.g. `publish`)
2. Create a user and give him permissions to access it
3. Create the data structures for eZ publish with file `sql/publish_mysql.sql` or `sql/publish_postgresql.sql`
4. If you extracted `data.tar.gz` before, you should also fill the database with the example data in file `sql/data_mysql.sql`

3.2.1.3 Finishing the install

1. Rename `site.ini` to `site.ini.php` and edit it.
2. Test if you can access `sitedir.ini` with a WWW browser
   (example: `http://www.yourserver.com/ezpublish/sitedir.ini`).

   a) If you get a “Forbidden”, everything is good and safe.
   b) If you get the file, then your server doesn’t obey `.htaccess` files. Try the next install in section 3.2.2, it is much safer then. Otherwise you can still use eZ publish, but have to remember that it is not as safe as it could be.
3. Finished!!
   Go to `http://www.yourserver.com/ezpublish/index_admin.php`, login as `admin` with password `publish` and change your password. Then go to `http://www.yourserver.com/ezpublish`. Have fun.

3.2.2 Installing with shell access on server and two separate directories for eZ publish

If you have shell access on your server and you have the possibility to create directories which are not accessible by WWW browsers, you can use the script `ezinstaller.sh`. It will ask you all relevant questions and install eZ publish in a very secure way.