Webmail

Step-by-Step Guide

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Contents

Revisions

September 5 1999

- Initial version of this guide

Credits

Thanks to all the people who emailed me with their feedback, suggestions, and questions! I'm really glad my howtos have been able to help people out, please keep on visiting my site!

Thanks to these fine folks for their wonderful products:

- The Apache Group (http://www.apache.org/contributors)
- The PHP Development team (http://www.php.net/credits.php3)
- T.c.X DataKonsult AB (http://www.mysql.com/info.html)
- The Horde Project (http://www.horde.org)

These are all excellent products and they work amazingly well with each other!

Introduction

This document provides a step-by-step guide for installing a Webmail server on your Linux box. We will be using the IMP IMAP webmail client.

Disclaimer

I cannot guarantee the accuracy or correctness of the information I present in this howto. What I describe here is basically a log of what I do to install IMP on my system. Do not blame me if something goes wrong, there are no warranties so use this information at your own risk!

Contacting Me

As much as I'd like to be able to help you when things go wrong, I've spent too much time answering things that are either in this document or in documentation that comes with the packages I describe. I don't have enough time to answer every question (my Inbox gets flooded sometimes) so to make things easy on me, please please please follow this guide carefully (at least the first time through) and read all the applicable documentation before emailing me with questions.

If you have read this guide very carefully, and followed the steps exactly but still encounter problems, have questions, comments, or suggestions, send me email at yzhang@sfu.ca. I will try my best to answer your question or point you to better resources.

Background

It really sucks when you can't check get access to your email, and that's exactly what happened when I started my last job. I was sitting behind a company firewall where all I had was access to the web, so I set out to look for a good Webmail package.

Having looked at many packages, I finally settled with IMP. It worked out great, was really easy to get up and running, and I was happy – I had my email and I felt connected again! This guide is dedicated to everyone that is stuck the same situation, although IMP can do much more :)

Requirements

In writing this document, I will assume that you already have the following up and running happily:

- Redhat Linux 6.0
- Mail services (e.g. Sendmail, Qmail, etc.)
- IMAP
- Apache
- PHP (with IMAP support)
- MySQL (or some other database)

My system is running RedHat Linux 6.0, so what I describe here is heavily biased towards Redhat systems. However, the information should be generic enough that you can apply this to most other Linux distributions.

If you don't already have Apache, PHP, and MySQL (or another database) running together, take a look at my Web Database guide first. You will need to have that going before this will work because IMP is a PHP application.

You will probably have to recompile PHP to add IMAP support, but we will do that together in this guide. Let's start by getting all the necessary components.

Getting IMAP

The IMAP package that comes with Redhat doesn't have any development libraries, so we will have to grab ones that do. As of this writing, the latest version is 4.6-3, so go to http://www.rpmfind.net/linux/RPM/IByName.html and download:

- imap-4.6-3
- imap-devel-4.6-3

Getting PHP

Unless you already have IMAP support compiled into PHP, you will have to get the source and recompile. The latest PHP is 3.0.12 (since 4.0 is still in beta testing), so we want to grab that from http://www.php.net.

Getting IMP

You need to get two packages for IMP, go to http://www.horde.org/imp/download/ and download the latest stable source distributions of Horde and IMP. As of this writing, this would be:

- horde-1.0.10
- imp-2.0.11

You'll probably notice on the Horde homepage that they make a lot of other nifty things like a news client (Troll) and a group calendar (Kronolith), but let's do one thing at a time and stick with IMP first :)

Building PHP

Next thing to do is build PHP with IMAP support. So assuming you downloaded those files into /tmp, we have to install the new IMAP packages first.

Installing IMAP RPMs

We have to be root to install RPMs, so let's do that:

```
$ cd /tmp
$ su
# rpm –Uvh imap*
```

That should install the imap and imap-devel packages. Pretty easy so far, let's continue by rebuilding PHP.

Building PHP

If you've never built PHP before, you should take a look at my Web Database guide. Otherwise I'll assume you are quite comfortable doing that. You should know what directives you normally use when running the configure script; the only extra one to add is the **--with-imap** directive.

So, I'll show you what I do, make changes as necessary for your system. Start by extracting the PHP source and running the configure script:

```
$ cd /tmp
$ tar -zxvf php-3.0.12.tar.gz
$ cd php-3.0.12
$ ./configure --with-apxs=/usr/local/apache/bin/apxs \
              --with-config-file-path=/etc/httpd \
              --with-mysql \
              --with-imap \
              --with-system-regex
```

You should know what the configure script does, the important line is the one that imap directive. After running that configure script, you can build PHP by running make:

```
$ make
```

If that completed without errors, you will have to su to root and install PHP:

```
$ su
# make install
```

And you've got an IMAP enabled PHP, whee! On with the show.

Installing Horde and IMP

We have PHP with IMAP support, so we can go on to installing Horde and IMP. This is really straightforward, we simply extract the files into your web root.

Extracting the TARs

Let's assume your web documents are stored in /home/httpd/html, and that you downloaded the Horde and IMP tars into /tmp:

```
$ cd /home/httpd/html
$ tar –zxf /tmp/horde-1.0.10.tar.gz
$ mv horde-1.0.10 horde
```

Note that I renamed the horde directory to be called horde. You can also make a symlink instead if you so desire, let's continue:

```
$ tar –zxf /tmp/imp-2.0.11.tar.gz
$ mv imp-2.0.11 imp
```

Next step is to configure Horde and IMP.

Configuring Horde and IMP

There are many ways of configuring Horde and IMP, we will do so by using the Perl scripts that come with them. Be sure to read the documentation that comes with Horde and IMP at this point, especially if you aren't using MySQL as your database.

```
$ cd horde
$ chmod 000 setup.php3
```

We change the permissions on setup.php3 to 000 so that no one can read, write, or execute it. Since we aren't setting up Horde/IMP through PHP, we have to do this.

```
$ cd lib/src
$ echo database=mysql > built.opts
$ ./build.pl
```

Now do the same thing in the IMP directory:

```
$ cd /home/httpd/html/horde/imp/lib/src
$ echo database=mysql > built.opts
$ ./build.pl
```

Okay, now we will create the necessary MySQL database for Horde and IMP. There is a file in /home/httpd/html/horde/config/scripts called mysql_create.sql that contains the SQL commands to do the job:

```
$ cd /home/httpd/horde/config/scripts
$ mysql –u root –p < mysql_create.sql
```

Now we run the IMP setup script, it'll ask a bunch of questions:

```
$ cd /home/httpd/html/horde/imp/config/scripts
$ ./impsetup
```

You should go through each screen to make sure everything looks right. Here are some tips:

- if you are primarily using IMP to interface your own server, set the **IMAP Server Options | IMAP Server** option to **localhost**
- you will probably have to change **Required Options | IMP Root URL** to /horde/imp instead of /imp, unless you make a mapping otherwise

Okay, now there is a default footer that gets appended to every message sent from IMP, this is in the file /home/httpd/private/horde/imp/config/trailer.txt. You can set this to whatever you like, I just clear mine out:

```
$ cd /home/httpd/private/horde/imp/config
$ cat /dev/null > trailer.txt
```

Configuring Apache

We have to make some minor modifications to the Apache configuration files. This is necessary because Horde/IMP needs some specific PHP variables to be set, and these settings are in conflict with settings that I normally have turned on in my global php.ini.

In your Apache's httpd.conf or access.conf (normally in /etc/httpd) and add these lines to ensure that these PHP settings are set as required in the horde/ directory tree:

```
<Directory /home/httpd/html/horde>
        php3_magic_quotes_gpc Off
        php3_magic_quotes_runtime Off
        php3_error_reporting 7
</Directory>
```

Now restart your Apache and point your browser to http://localhost/horde/imp. Congratulations, you're all done! You have successfully setup a Webmail server!

When you have time, take a look through the Horde and IMP documentation, there are lots of things that you can configure and customize. You can change the entire look and feel of the application, and also it's behaviour. Enjoy!

Security Issues

Now that it's all working, you should probably think about things like security. If you don't like the idea of this information flying around in clear-text, you should add SSL to your web server and make IMP accessible only through SSL.

See my Apache+mod_ssl howto for more information on SSL.

Conclusion

This concludes this step-by-step howto. I hope you've found this document useful! Your support, comments and suggestions fuel this site so please visit often, send me lots of emails and you will get more howtos!