



Courier-IMAP & Webmail

By: Alex Villegas

Simplify.



All trademarks used herein are the sole property of their respective owners.

Simplify.

Alex Villegas

- »» cPanel: Level II Support Representative 06/2006
Level III Advanced Tech 05/2007
- »» Bilingual: Spanish – Interest on Linguistics.

Courier & Webmail

Normal style

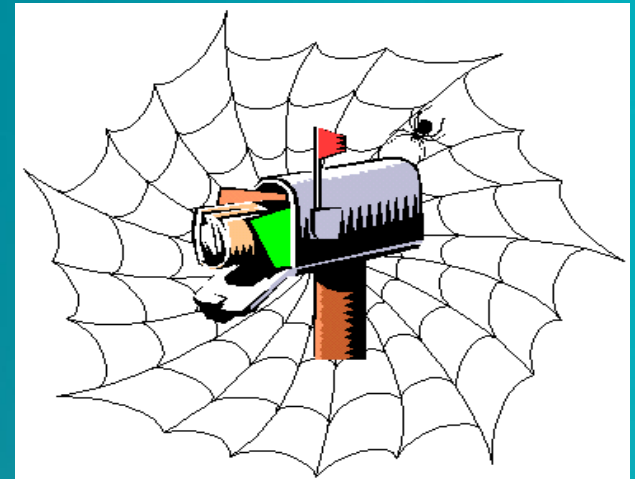
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz 0123456789.:;("'
!?)

Bold style

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz 0123456789.:;("'
!?)

Italic style

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz 0123456789.:;("'
!?)



Simplify.

Topics Covered:

- **Courier-IMAP** (IMAP/POP3 server)
- **Horde** (Webmail)
- **SquirrelMail** (Webmail)

Focus:

- » Configuration
- » Customization
- » Troubleshooting

Webmail Authentication requires gamin.

If you are having login issues ensure that the following packages are installed:

gamin

gamin-devel

Maildir vs Mbox

»» Mbox – inbox, .folder (cppop)

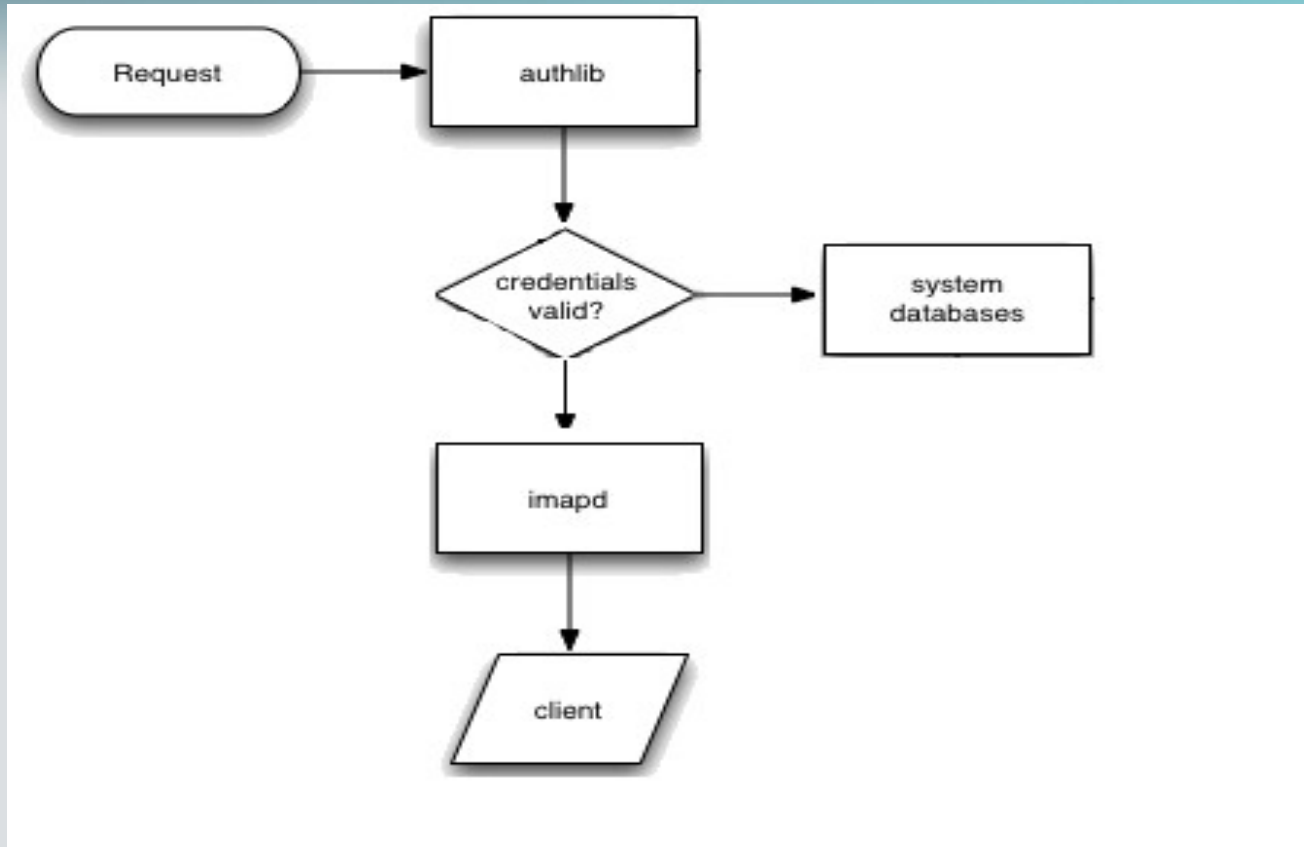
»» Maildir – cur, new, tmp (courier)

cPanel currently only supports **Maildir**.

COURIER works with **Maildir**

NOTE: NEOMAIL does not support Maildir.

Process Overview



System Databases

Passwords path/location:

➤➤ **/etc/passwd**

```
cptest9:x:32009:32011::/home/cptest9:/usr/local/cpanel/bin/noshell
```

```
cptest50:x:32010:32012::/home/cptest50:/usr/local/cpanel/bin/noshell
```

```
blahtest:x:32011:32013::/home/blahtest:/usr/local/cpanel/bin/noshell
```

Virtual Accounts:

➤➤ **/home/user/etc/example.com/passwd**

```
alexio:x:32011:32013::/home/blahtest/mail/blahtest.com/alexio:/usr/local/cpanel/bin/noshell
```

Note: cPanel provides a driver that handles the authlib authentication against the system databases.

Configuration Files:

»» `/usr/lib/courier-imap/etc`

- `imapd`
- `Imapd-ssl`
- `pop3d`
- `pop3d-ssl`

Note: POP3 runs on port 110 and IMAPD on port 143
POP3-SSL on port 995 and IMAP-SSL port 993

Authentication

Courier Authentication Library: **authlib** or **courier-authlib**

The Courier authentication library consists of two libraries:

lcourierauth: Authentication functions

lcourierauthsasl: SASL* authentication functions

* **NOTE:** SASL is the Simple Authentication and Security Layer, a method for adding authentication support to connection-based protocols.



Testing Authentication (POP3)

```
# telnet localhost 110
```

```
Connected to localhost.
```

```
Escape character is '^]'.  
+OK Hello there.
```

```
user username
```

```
+OK Password required.
```

```
pass password
```

```
+OK logged in.
```

Simplify.



Testing Authentication (POP3)

stat

+OK 26 49857

retr 1

+OK 1073 octets follow.

... message

quit

+OK Bye-bye.

Connection closed by foreign host.

Simplify.



Testing Authentication (IMAPD)

```
# telnet localhost 143
```

```
Connected to localhost.
```

```
Escape character is '^['.
```

```
* OK Courier-IMAP ready. Copyright 200x Blah Company.
```

```
See
```

```
COPYING for distribution information.
```

```
1 login username password
```

```
1 OK LOGIN Ok.
```



Testing Authentication (IMAPD)

2 examine inbox

* OK [PERMANENTFLAGS ()] No permanent flags permitted

* 26 EXISTS

* 0 RECENT

* OK [UIDVALIDITY 989061119] Ok

2 OK [READ-ONLY] Ok

3 logout

* BYE Courier-IMAP server shutting down

3 OK LOGOUT completed

Connection closed by foreign host.

Auto Purge

/usr/lib/courier-imap/etc/imapd

```
##NAME: IMAP_EMPTYTRASH:0
```

```
#
```

```
# The following setting is optional, and causes messages from the given  
# folder to be automatically deleted after the given number of days.
```

```
# IMAP_EMPTYTRASH is a comma-separated list of folder:days. The default  
# setting, below, purges 7 day old messages from the Trash folder.
```

```
# Another useful setting would be:
```

```
#
```

```
# IMAP_EMPTYTRASH=Trash:7,Sent:30
```

Note: Resource Intensive, Stats ALL of your messages.



Move Deleted to Trash

`/usr/lib/courier-imap/etc/imapd`

```
##NAME: IMAP_MOVE_EXPUNGE_TO_TRASH:0
```

```
#
```

```
# Set IMAP_MOVE_EXPUNGE_TO_TRASH to move expunged messages to Trash. This
```

```
# effectively allows an undo of message deletion by fishing the deleted
```

```
# mail from trash. Trash can be manually expunged as usually, and mail
```

```
# will get automatically expunged from Trash according to IMAP_EMPTYTRASH.
```

```
#
```

```
# NOTE: shared folders are still expunged as usual. Shared folders are
```

```
# not affected.
```

```
#
```

```
IMAP_MOVE_EXPUNGE_TO_TRASH=0
```

➤➤ Provides an “undo” function

➤➤ Depends on Webmail and Mail Clients interaction.

Simplify.

Share Folders

» Simple Way

» Complex Way



Simple Way – cPanel 11

»» Link the mail directory to main account

```
root@rhel4-64release [/home/cptestin/mail]# ls -al | grep cptesting_com  
lrwxrwxrwx 1 cptestin cptestin 21 May 2 13:50  
.testito\@cptesting_com -> cptesting.com/testito/
```

»» No hassle

»» Simple access for cPanel account owner

Simplify.

Complex Way - ACL's

»» Assign permissions to each email folder

»» Requires client support

– Else command line

»» Authlib:

– Report capabilities & group membership

Shared folders listed in `/usr/lib/courier-imap/etc/shared/index`

»» List available to all clients

Troubleshooting

»» Logs

»» Processes

»» Tools

Logs

»» /var/log/maillog

- authdaemon
- imapd
- pop3d

```
May  2 13:55:52 rhel4-64release imapd: LOGIN,  
user=cptestin@rhel4-64release.cpanel.com,  
ip=[::ffff:127.0.0.1], protocol=IMAP
```

```
May  2 13:55:53 rhel4-64release imapd: LOGOUT,  
user=cptestin@rhel4-64release.cpanel.com,  
ip=[::ffff:127.0.0.1], headers=0, body=0,  
time=1
```

Processes

»» Courierlogger

»» Couriertcpd
– Listener – key

»» Authdaemond
»» key

»» IMAP - Client

Outlook

»» Authtest

- `authtest userid`
- `authtest userid password`
- `authtest userid password newpassword`
- `authenumerate`

Tools

```
root@rhel4-64release [/home/cptestin/mail]# authtest  
cptestin
```

```
Authentication FAILED: Operation not permitted
```

```
root@rhel4-64release [/home/cptestin/mail]# authtest  
cptestin p4ssword
```

```
Authentication succeeded.
```

```
Authenticated: cptestin@rhel4-64release.cpanel.com (system  
username: cptestin)
```

```
Home Directory: /home/cptestin
```

```
Maildir: /home/cptestin/mail
```

```
Quota: (none)
```

```
Encrypted Password: $1$pvpxlSP3$EKwJ9q8CWdS2EdZDDFmT81
```

```
Cleartext Password: p4ssword
```

```
Options: (none)
```

Overview

»» Horde

- Framework & components (Turba, Kronolith)
- Documentation sparse, scattered

»» SquirrelMail

- Focused on single app, plugins to extend
- Documentation much better

»» Horde

- Framework and component
- **`/usr/local/cpanel/base/horde`**
- config directory
- `config.php`; `registry.php`, `prefs.php`, `servers.php`, others

»» SquirrelMail

- **`/usr/local/cpanel/base/3rdparty/squirrelmail/config`**
- `config.php`, `config_local.php`

Customizing

- Simple
- Configuration override
- Total Replacement

Read the following files:

`/usr/local/cpanel/src/3rdparty/gpl/README-horde`

`/usr/local/cpanel/src/3rdparty/gpl/README-squirrelmail`

Customizing SquirrelMail:

- »» Plugins
- »» Themes and Styles
- »» Site customizations
- »» Internationalization
- »» Personal and shared address books

Customization Reference:

<http://www.squirrelmail.org/docs/admin/admin-7.html>

Customizing HORDE:

- Ingo (filters)
- Turba (address book)
- Email address automatic expansion
- IMP (mail)
- Instead of a blank page when you log in, set up a summary layout

Customization Reference:

http://web.uvic.ca/~kloostec/horde_brentwood.html

The **update-squirrelmail** script will check for the existence of:

`/var/cpanel/squirrelmail/squirrelmail-local.tar.gz`.

If this archive exists, then it will be used in lieu of cPanel's provided SquirrelMail sources.

The **update-squirrelmail** script will check for the existence of **`/var/cpanel/squirrelmail/overlay.tar.gz`**

If detected, the tarball will be extracted into **`/usr/local/cpanel/base/3rdparty`**

If the file `/var/cpanel/squirrelmail/install` exists and is executable, then the script will be executed and **update-squirrelmail** will exit immediately.

This execution will bypass cPanel's manipulation of the configuration files. If the file exists and is not executable, then the file will be printed to STDOUT.

The normal cPanel configuration file manipulation will immediately follow.



Configuration Override - HORDE

The update-horde script will check for the existence of **`/var/cpanel/horde/horde-<Horde Version>-local.tar.gz`**
If this archive exists, then it will be used in lieu of cPanel's provided Horde sources.

The update-horde script will check for the existence of **`/var/cpanel/horde/overlay.<Horde Version>.tar.gz`**

If detected, the tarball will be extracted into **`/usr/local/cpanel/base`**



Configuration Override - HORDE

If the file `/var/cpanel/horde/install` exists and is executable, then the script will be executed and **update-horde** will exit immediately.

This execution will bypass cPanel's manipulation of the configuration files. If the file exists and is not executable, then the file will be printed to STDOUT.

The normal cPanel configuration file manipulation will immediately follow.



Total Replacement

You The Man !

Simplify.

Troubleshooting

System Dependencies:

- »» MySQL (Horde)
- »» Locales
- »» Courier
- »» Exim
- »» PHP
- »» Apache



cPanel

Horde Stuck on Language Screen

Things to troubleshoot:

- Restart authlib: **service courier-authlib restart**
- Make sure **gamin** and **gamin-devel** are installed
- Test the HORDE database for corruption:
myisamchk horde_users.MYI
- Force update HORDE:
/usr/local/cpanel/update-horde --force

Simplify.

Horde Still Stuck?

What would you do in that case?

- A) Utilize a shovel, pliers and WD-40.
- B) Call your wife/girlfriend/fiance/significant other.
- C) Open a ticket with cPanel Support.
- D) All of the above and beyond.

»» Internal cPanel PHP

- `/var/cpanel/usecphp`
- Exercise Care - check application requirements

»» Rebuilding internal cPanel PHP:

`/scripts/makecphp`

»» Limitations with Internationalization

No native support for Unicode*

*Note: The PHP Team is allegedly working on adding Unicode support on the oncoming PHP version 6.x.

Locales

» gettext

» libc

- Age determines quality/existence

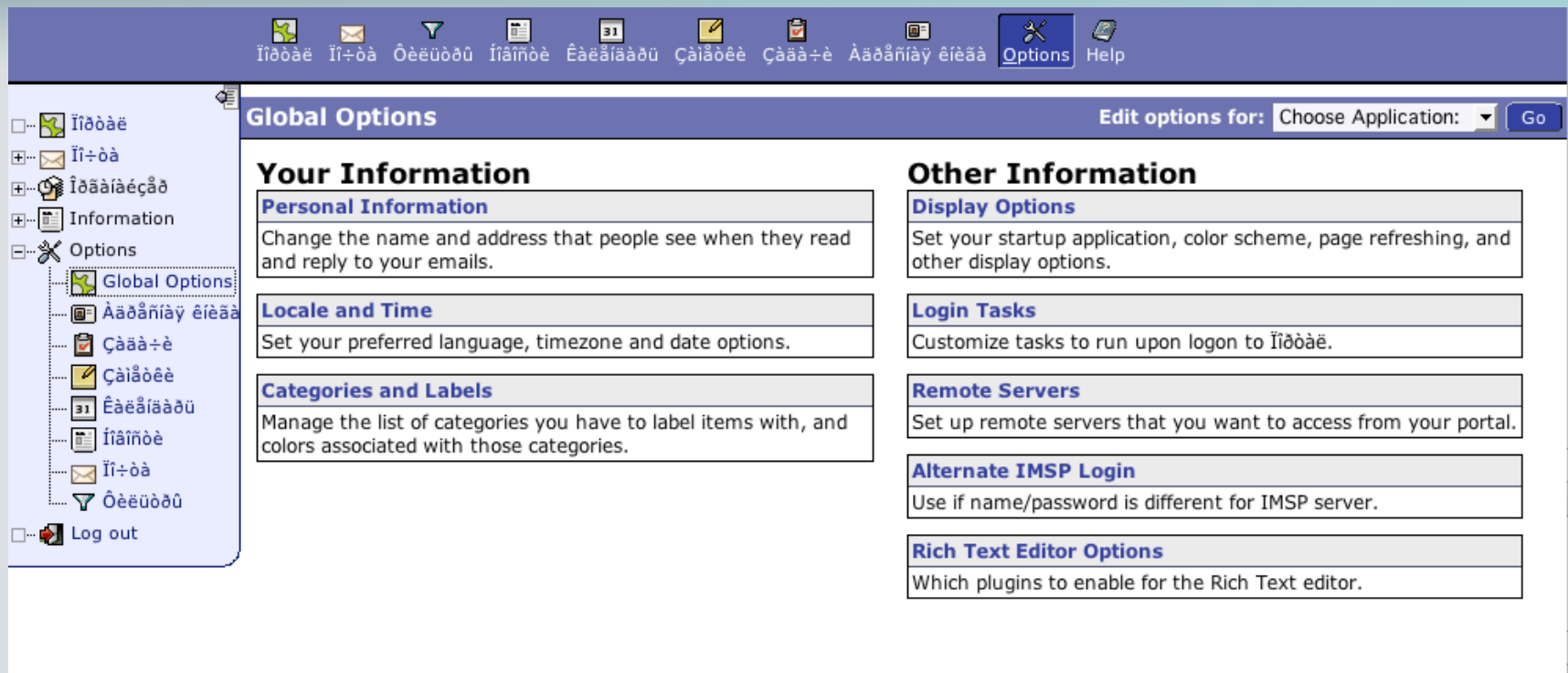
- Listing: **locale -a**

- Building: `localedef -f charmap -i inputfile outputname`

```
localedef -i et_EE -f ISO-8859-15 et_EE
```

» Quality and translation depends upon project

Horde Preferences Conflicts



Global Options Edit options for: Choose Application:

Your Information

Personal Information
Change the name and address that people see when they read and reply to your emails.

Locale and Time
Set your preferred language, timezone and date options.

Categories and Labels
Manage the list of categories you have to label items with, and colors associated with those categories.

Other Information

Display Options
Set your startup application, color scheme, page refreshing, and other display options.

Login Tasks
Customize tasks to run upon logon to **Horde**.

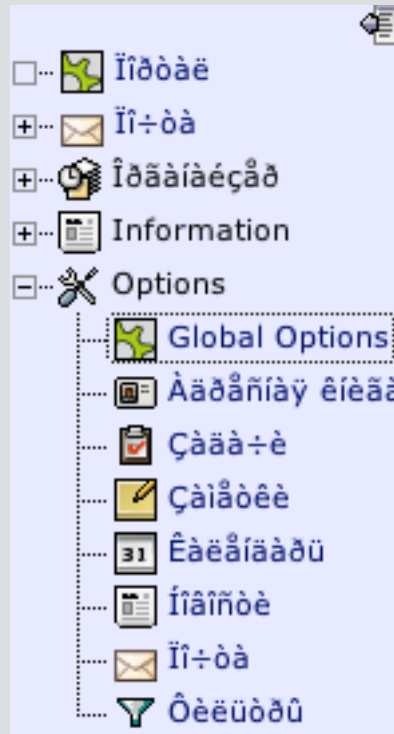
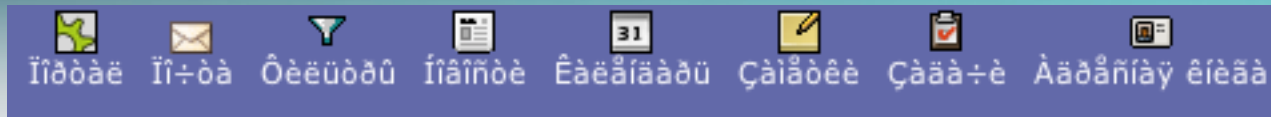
Remote Servers
Set up remote servers that you want to access from your portal.

Alternate IMSP Login
Use if name/password is different for IMSP server.

Rich Text Editor Options
Which plugins to enable for the Rich Text editor.

- Horde
- Mail
- Address Book
- Information
- Options
 - Global Options
 - Appearance
 - Calendar
 - Categories
 - Filters
 - Mail
 - Navigation
- Log out

Horde Preferences Conflicts



POP QUIZ !!!

1. What do you think about this Seminar? Honesty a plus ;-p
2. What is Courier-IMAP?
3. Where are the pop3/imapd passwords stored?
4. What port does POP3D-SSL run?
5. Shared Folder. Do you prefer the Simple or Complex method?
6. Would you be joining us for the 2008 cPanel Seminar?

Q & A



Simplify.