



# The Horde 4 PHP framework

Gunnar Wrobel

wrobel@horde.org

May, 13th 2011

# Components

Components = Modules = Libraries = Packages = ...



Photo: Rudolf Ammann [<http://www.flickr.com/photos/rka/1415516/>]

# The Horde 4 PHP framework

There are more than 90 components available from <http://pear.horde.org>.



Photo: Aaron Merrifield [<http://www.flickr.com/photos/spammt/4823025103/>]

# Groupware

To obtain pure B. Shake  
Add  $\text{HCl}$  ( $\text{aq}$ )/ether  $\rightarrow$  Ag. layer  
to the ag. layer in sif  $\rightarrow$  Et<sub>2</sub>O + ether

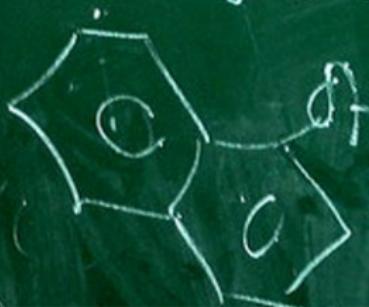
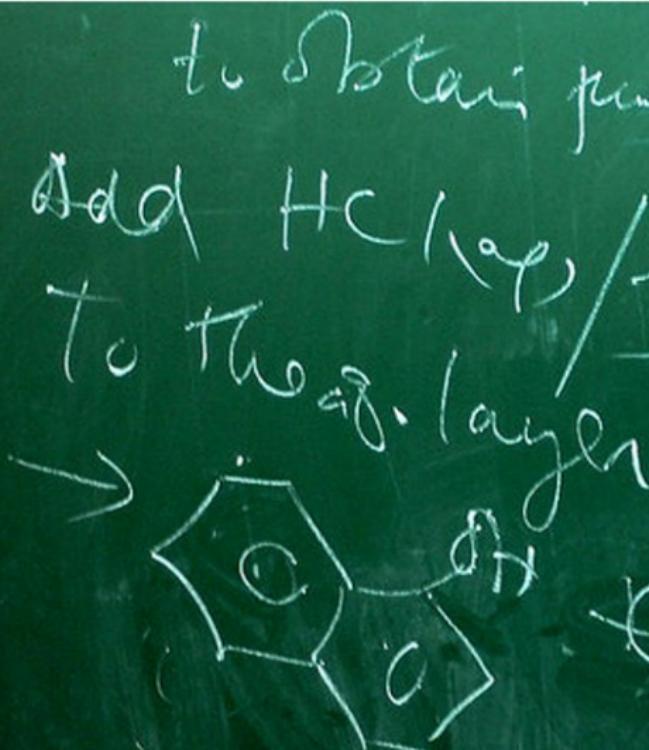


Photo: Denise Chan [<http://www.flickr.com/photos/denn/5005046/>]

# Groupware



## Definition

"[...] groupware [...] is computer software designed to help people involved in a common task achieve their goals [...]."<sup>a</sup>

<sup>a</sup><http://en.wikipedia.org/wiki/Groupware>

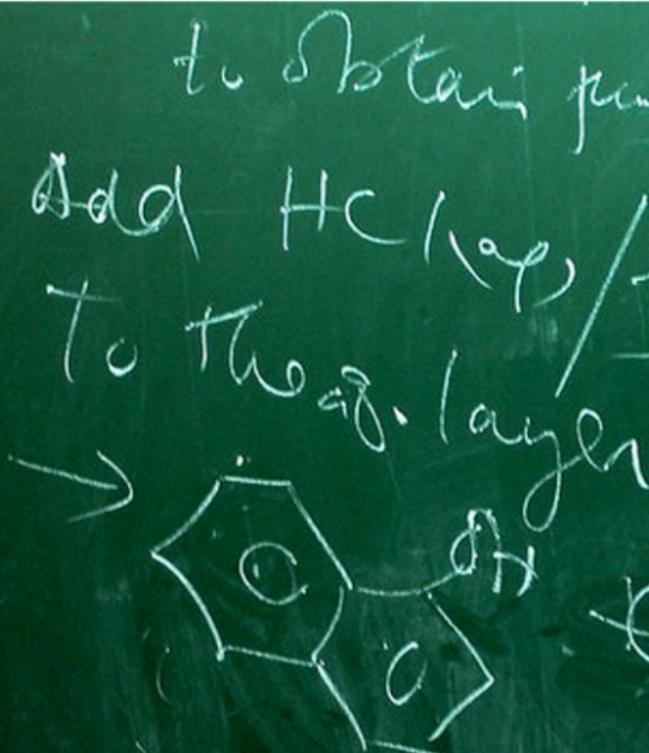
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It is usually associated with team members not physically co-located.

## Asynchronous

Communication between team members is primarily asynchronous.

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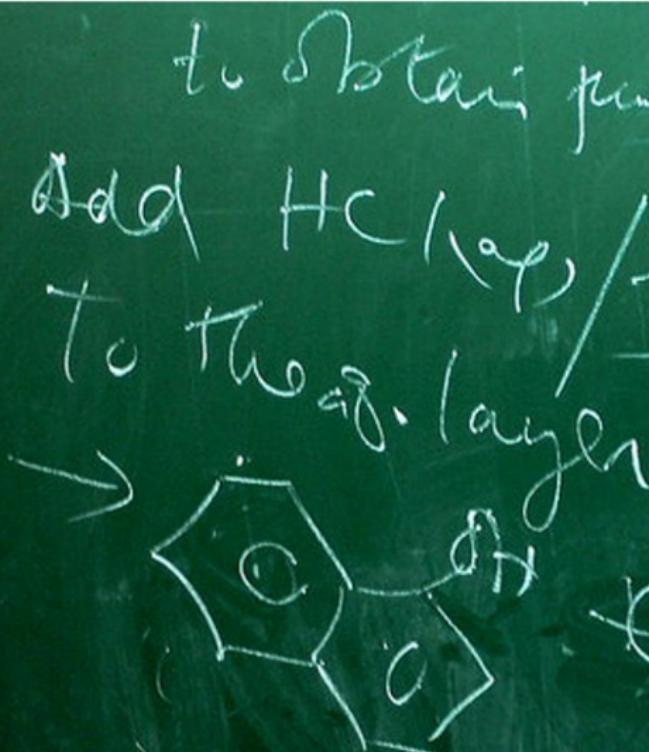
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# E-mail

An E-Mail client is the corner stone of most groupware systems



Photo: Éole Wind [<http://www.flickr.com/photos/eole/4500783172/>]

# Demo Time - E-Mail

The screenshot shows the Horde Webmail interface in Google Chrome. The title bar reads "Webmail :: Posteingang - Google Chrome". The address bar shows the URL "temple.gunnarwrobel.de/horde/imp/#msg%253A%257B5%257DINBOX1". The top right corner displays the date "Fr, 13. Mai, 08:21" and the user "wrobel". The sidebar on the left includes links for "Neue Nachricht", "Nachrichten holen", "Alte Meldungen", "Portal", "Benutzereinstellungen", "Abmelden", "Posteingang" (which is selected), "Entwürfe", and "Gesendet". Below these are sections for "Filter", "Kalender", "Aufgaben", and "Notizen", followed by "Ordner-Einstellungen" and "Virtuelle Ordner". The main content area is titled "Posteingang" and shows two messages. The first message, "test" from "a@temple.gunnarwrobel.de" dated "06.12.2010", is selected and highlighted in yellow. A context menu is open over this message, listing options: Antworten (Answer), Weiterleiten (Forward), Markieren als... (Mark as...), Ausschlussliste (Exclude list), Positivliste (Positive list), Löschen (Delete), and Wiederherstellen (Restore). The "Weiterleiten" option is also highlighted in yellow. The second message, "Max Mustermann" with subject "LinuxTag Vortrag", is listed below. The top right of the main area shows "2 Nachrichten" and a search bar.

# Demo Time - Mobile

A mobile application interface for managing email folders. At the top, there are buttons for "Portal", "Folders", and "Log out". Below is a search bar with a magnifying glass icon. The main area lists the following folders:

- Inbox (10 messages)
- Drafts
- Sent
- Spam
- Trash
- [redacted]
- [redacted]
- Bounced
- [redacted]
- Consulting
- Consulting.2009

The mobile application interface showing an email message. At the top, there are buttons for "Back" and "Log out". The subject of the email is "[turba] Addressbook like GMail".  
From: Sebastian Kronenwerth  
  
[turba] unnamed 1 KB  
Hi everybody,  
  
is it planned that the Addressbook gets a redesign so that it provides the same features like GMail's addressbook, i.e.:  
  
- Add a user in different groups  
- Add flexible addressbook fields like GMail.  
  
Best wishes,  
Sebastian  
  
--  
Turba mailing list - Join the hunt: <http://horde.org/bounties/#turba>  
Frequently Asked Questions: <http://horde.org/faq/>  
To unsubscribe, mail: [turba-unsubscribe@lists.horde.org](mailto:turba-unsubscribe@lists.horde.org)

# PHP + IMAP

PEAR-Net\_IMAP



## Pro

- Runs on any PHP installation.
- Available as a separate component.

## Contra

- Extremely slow.
- Very limited IMAP featureset.
- Has a fair amount of issues.

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# PHP + IMAP

PHP IMAP extension - based on the c-client library



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- Available by default in many PHP installations.

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- Surprisingly slow for many of the IMAP calls.
- Not maintained anymore.
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Roundcube IMAP code



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## Horde\_Imap\_Client



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- Extensive support for modern IMAP features.

### Contra

- Minimal documentation.
- Complex library.

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# PHP + IMAP

The IMAP RFC specifications implemented in Horde\_Imap\_Client



RFC 2086/4314 - ACL, RFC 2087 - QUOTA, RFC 2088 - LITERAL+, RFC 2195 - AUTH=CRAM-MD5, RFC 2221 - LOGIN-REFERRALS, RFC 2342 - NAMESPACE, RFC 2595/4616 - TLS & AUTH=PLAIN, RFC 2831 - DIGEST-MD5 authentication mechanism., RFC 2971 - ID, RFC 3348 - CHILDREN, RFC 3501 - IMAP4rev1 specification, RFC 3502 - MULTIAPPEND, RFC 3516 - BINARY, RFC 3691 - UNSELECT, RFC 4315 - UIDPLUS, RFC 4422 - SASL Authentication (for DIGEST-MD5), RFC 4466 - Collected extensions (updates RFCs 2088, 3501, 3502, 3516), RFC 4469/5550 - CATENATE, RFC 4551 - CONDSTORE, RFC 4731 - ESEARCH, RFC 4959 - SASL-IR, RFC 5032 - WITHIN, RFC 5161 - ENABLE, RFC 5162 - QRESYNC, RFC 5182 - SEARCHRES, RFC 5255 - LANGUAGE/I18NLEVEL, RFC 5256 - THREAD/SORT, RFC 5258 - LIST-EXTENDED, RFC 5267 - ESORT; PARTIAL search return option, RFC 5464 - METADATA, RFC 5530 - IMAP Response Codes, RFC 5819 - LIST-STATUS, RFC 5957 - SORT=DISPLAY, RFC 6154 - SPECIAL-USE/CREATE-SPECIAL-USE, RFC 6203 - SEARCH=FUZZY

# Horde\_Imap\_Client

Installing the Horde\_Imap\_Client is trivial

```
# Ensure the Horde PEAR server is known  
pear channel-discover pear.horde.org
```

```
# Install the Horde_Autoloader component  
pear install horde/Horde_Autoloader
```

```
# Install the Horde_Imap_Client component  
pear install horde/Horde_Imap_Client
```

# Horde\_Imap\_Client

Listing your IMAP mailboxes ...

```
<?php

// Provide autoloading of classes
require_once 'Horde/Autoloader/Default.php';

// Create client
$c = Horde_Imap_Client::factory(
    'Socket',
    array( 'username' => 'test', 'password' => 'test' )
);

// Print mailbox list
print join("\n", array_keys($c->listMailboxes('*')));
```



# Horde\_Imap\_Client

Listing your IMAP mailboxes ...

INBOX

INBOX/Aufgaben

INBOX/Drafts

INBOX/Kalender

INBOX/Kontakte

INBOX/Ledger/2011/01/company

INBOX/Ledger/2011/02/company

INBOX/Neue Notizen

INBOX/Notizen

INBOX/Sent

INBOX/Test

INBOX/stest

INBOX/test

# Invitations

Interface e-mail with calendaring



Photo: Anita Brown [<http://www.flickr.com/photos/2bsquaredesigns/4786027883/>]

# Demo Time - Invitations

Webmail :: Posteingang - Google Chrome

Deu Fr, 13. Mai, 08:14 wrobel

temple.gunnarwrobel.de/horde/imp/index.php#msg%253A%257B5%257DINBOX2

**Posteingang**

**2 Nachrichten**

Von	Betreff [Thema]	Datum	Größe
An: a@temple.gunnarwrobel.de	test	06.12.2010	2 KB
<input checked="" type="checkbox"/> Max Mustermann	LinuxTag Vortrag	07:41:49	19 KB

**Suche (Gesamte Nachrichten)**

**LinuxTag Vortrag von Max Mustermann** 07:41:49

**event-invitation.ics** 1 KB

**Max Mustermann** bittet um Ihre Anwesenheit bei "LinuxTag Vortrag".

**Beginn:** 13.05.2011 12:00 pm

**Ende:** 13.05.2011 1:00 pm

**Zusammenfassung:** LinuxTag Vortrag

**Teilnehmer**

Name	Rolle	Status
a@temple.gunnarwrobel.de	Erforderlicher Teilnehmer	Auf Antwort wartend

**Aktionen**

Anfrage akzeptieren und zu meinem Kalender hinzufügen ▾ **Los**

Neue Nachricht  
Nachrichten holen  
Alte Meldungen  
  
Portal  
Benutzereinstellungen  
Abmelden  
  
Posteingang  
Entwürfe  
Gesendet  
  
Filter  
Kalender  
Aufgaben  
Notizen  
  
Ordner-Einstellungen  
test  
Virtuelle Ordner



# Horde\_Itip

Installing the Horde\_Itip is trivial

```
# Ensure the Horde PEAR server is known  
pear channel-discover pear.horde.org
```

```
# Install the Horde_Autoloader component  
pear install horde/Horde_Autoloader
```

```
# Install the Horde_Itip component  
pear install horde/Horde_Itip
```



## Horde\_Itip



# Horde\_Itip

## Answering the iTip request

```
<?php

// Provide autoloading of classes
require_once 'Horde/Autoloader/Default.php';

// Parse iTip invitation
$vCal = new Horde_Icalendar();
$vCal->parsevCalendar(file_get_contents('itip-invitation.txt'));

// Describe the invited person
$resource = new Horde_Itip_Resource_Base('john.doe@example.com', 'John Doe');

// iTip Handler
$iTip = Horde_Itip::factory($vCal, $resource);

// Send response
$iTip->sendSinglepartResponse(
    new Horde_Itip_Response_Type_Accept(),
    new Horde_Itip_Response_Options_Horde(),
    new Horde_Mail_Transport_Mock()
);
```

# Calendar



Photo: Ion-Bogdan Dumitrescu [<http://www.flickr.com/photos/bitzi/265052661/>]

# Demo Time - Calendar

Kalender :: Mai 2011 - Google Chrome

Kalender :: Mai 2011

temple.gunnarwrobel.de/horde/kronolith/#month

**Neuer Termin** | **13.05.2011** | **Tag** | **Woche** | **Monat** | **Jahr** | **Aufgaben** | **Horde** | **Einstellungen** | **Hilfe** | **Absmelden**

**Mai 2011** | **Heute**

S	M	D	M	D	F	S
18	1	2	3	4	5	6
19	7	8	9	10	11	12
20	13	14	15	16	17	18
21	19	20	21	22	23	24
22	25	26	27	28	29	30
23	31	1	2	3	4	5
24	6	7	8	9	10	11

**Suche**

**Meine Kalender**

- Kalender von a@temple.gunnarw

**Meine Aufgabenlisten**

- Aufgabenliste
- von a@temple.gunnarw

**Gemeinsame Kalender**

Keine vorhanden

**Gemeinsame Aufgabenlisten**

Keine vorhanden

**Mai 2011**

Sonntag	Montag	Dienstag	Mittwoch	Donnerstag	Freitag	Samstag
18	1	2	3	4	5	6
19	8	9	10	11	12	13
20	15	16	17	18	19	20
21	22	23	24	25	26	27
22	29	30	31	1	2	3
23	31	1	2	3	4	5
24	8	9	10	11	12	13
25	15	16	17	18	19	20
26	22	23	24	25	26	27
27	29	30	31	1	2	3
28						4

**LinuxTag Vortrag**

Der Kalender "Kalender von a@temple.gunnarwrobel.de" wurde gespeichert.

# Demo Time - Mobile Calendar

Portal Month Log out

Day Month Summary

November 2010

M	T	W	T	F	S	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	1	2	3	4	5
6	7	8	9	10	11	12

Sun 11/28/2010

All day | 1st Advent

10:00 - 14:00 | Brunch  
Zweischlingen

16:00 - 20:00 | 

# Entering dates

Entering dates on the net today



# Meeting time



Photo: Andrew Wipple [<http://www.flickr.com/photos/andrewwippler/4428945418/>]

# Meeting time

Do you arrange a meeting time like this ...



We should talk about the LinuxTag feedback sometime during 16th and 22nd of May 2011.

Sure. What about the 17th May of 2011?

Sounds good. I'm available from 8 am to 12 am that day.

Lets say 9 am. That would work fine for me.

# Meeting time

Do you arrange a meeting time like this ...



We should talk about the LinuxTag feedback sometime **during 16th and 22nd of May 2011.**

Sure. What about the **17th May of 2011?**

Sounds good. I'm available from 8 am to 12 am that day.

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# Meeting time

or rather like this ...



We should talk about the  
LinuxTag feedback sometime  
**during next week.**

Sure. What about **tuesday?**

Sounds good. I'm available  
the whole morning that day.

Lets say 9. That would work  
fine for me.

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or rather like this ...



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LinuxTag feedback sometime  
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Sure. What about **tuesday?**

Sounds good. I'm available  
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# Entering dates

How might the widget look like?

# Demo Time - Quick Add

Kalender :: Mai 2011 - Google Chrome

Kalender :: Mai 2011

temple.gunnarwrobel.de/horde/kronolith/#month

**Neuer Termin**

**Mai 2011**

**Z.B. Essen mit Peter morgen abend**

**Hinzufügen zu:**

Kalender von a@temple.gunnarwrobel.de ▾

**Speichern** oder **Abbrechen**

Jahr | Aufgaben | Horde | Einstellungen | Hilfe | Abmelden | Heute |

	Mittwoch	Donnerstag	Freitag	Samstag
4		5	6	7
19	8	9	10	11
20	15	16	17	18
21	22	23	24	25
22	29	30	31	1
23	5	6	7	8
19	8	9	10	11
20	15	16	17	18
21	22	23	24	25
22	29	30	31	1
23	5	6	7	8

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**Gemeinsame Kalender**

Keine vorhanden

**Gemeinsame Aufgabenlisten**

Keine vorhanden

13 LinuxTag Vortrag

# Horde\_Date\_Parser

Installing the Horde\_Date\_Parser is trivial

```
# Ensure the Horde PEAR server is known  
pear channel-discover pear.horde.org
```

```
# Install the Horde_Autoloader component  
pear install horde/Horde_Autoloader
```

```
# Install the Horde_Date_Parser component  
pear install horde/Horde_Date_Parser
```



# Horde\_Date\_Parser

Parsing your language...

```
<?php  
  
// Provide autoloading of classes  
require_once 'Horde/Autoloader/Default.php';  
  
$date = Horde_Date_Parser::parse(  
    'next week tuesday morning'  
);  
  
echo $date . "\n";
```



# Horde\_Date\_Parser

... to make your computer understand you.

2011-05-17 09:00:00

# Components

The webmail application has been the core element for 13 years now.

Webmail

# Components

Calendaring is just another application.

Webmail

Calendar

# Components

But there are applications for contacts, task, and notes as well.

Webmail

Calendar

Contacts

Task

Notes

# Components

Not to forget the time tracker, the ticket system, a wiki, ....

Webmail

Calendar

Contacts

Task

Notes

Time tracker

Tickets

Wiki

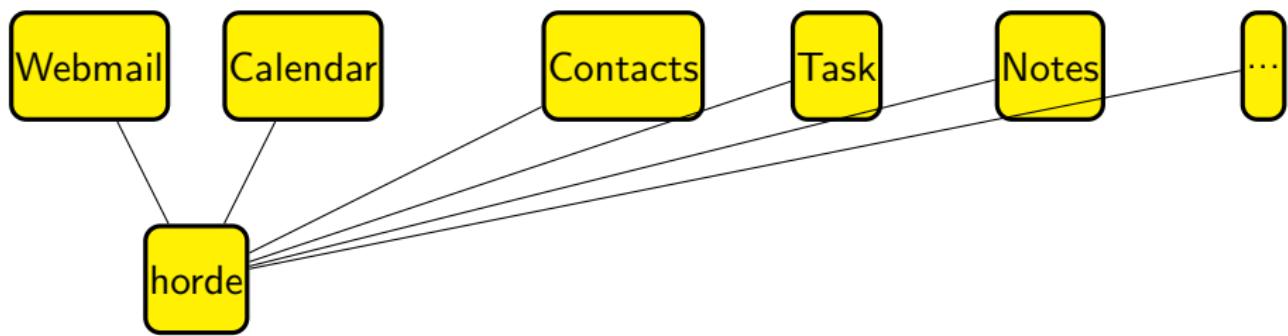
File manager

Blogging

...

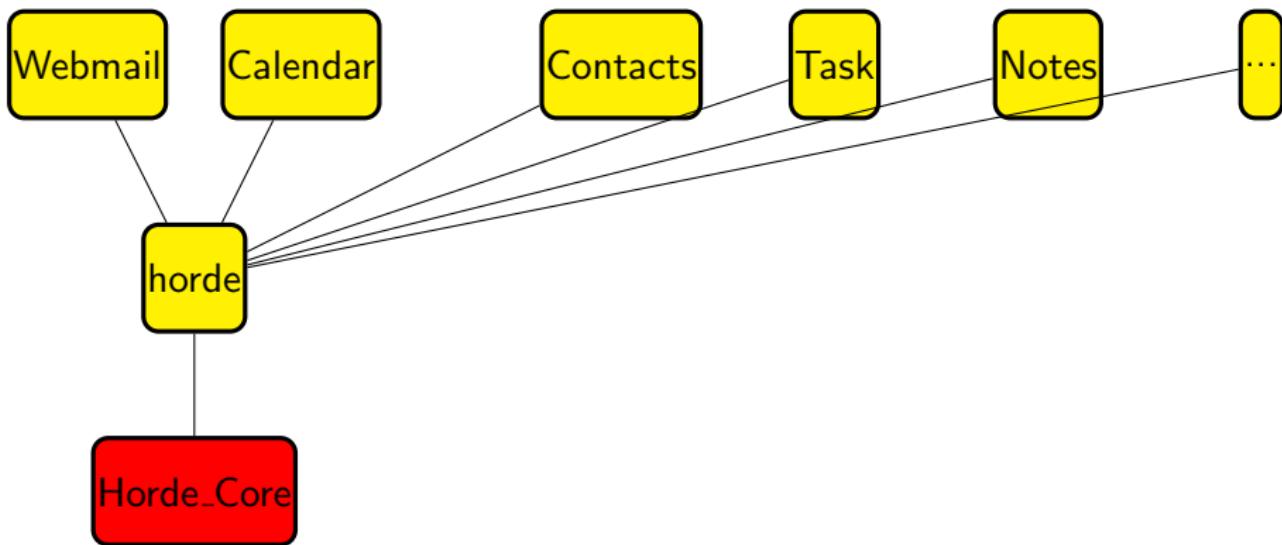
# Components

“horde” handles basic tasks such as authentication, permissions, ...



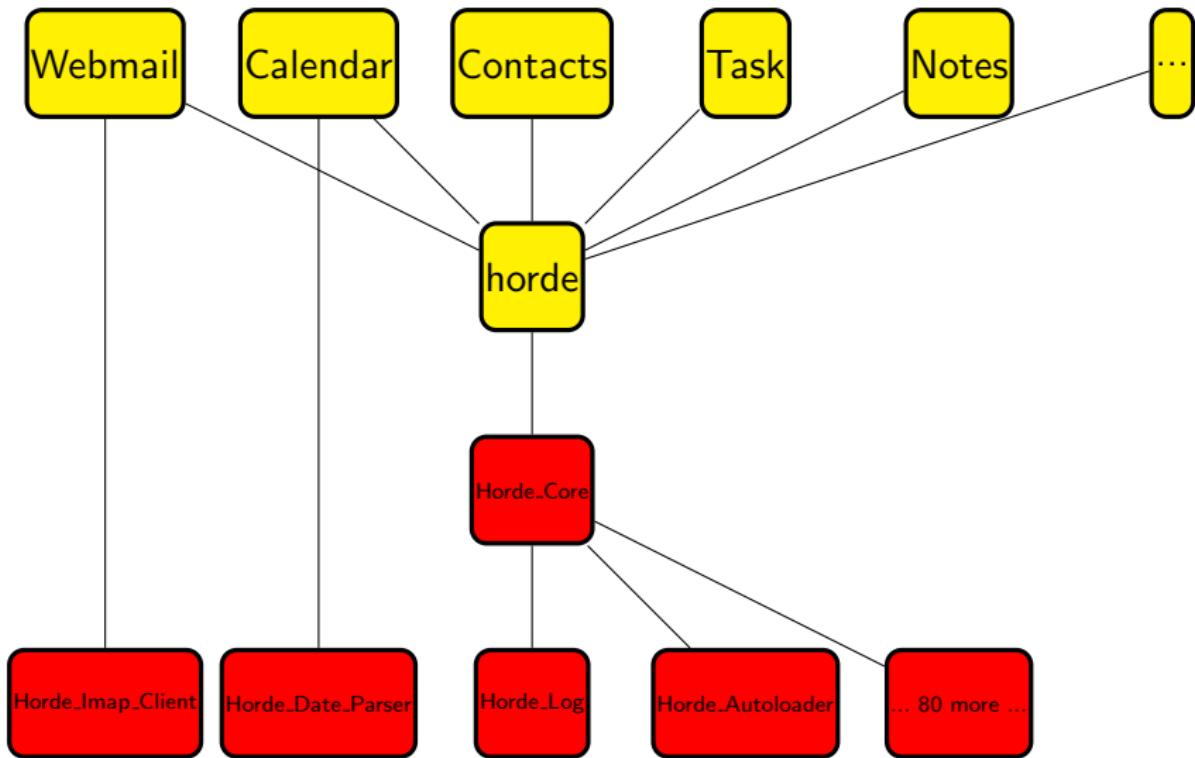
# Components

And below that live the “framework” components.



# Components

The framework is independent of the applications.



# Flexible

Horde strives at being the most flexible groupware on the net.



Photo: Jon Lucas [<http://www.flickr.com/photos/jonlucas/204150906/>]

# Summary

## Horde 4 PHP framework

- The Horde 4 PHP framework is independent of the Horde applications.
- The Horde 4 architecture is extremely modular.

## Horde Applications

- Horde can be adapted to the workflow instead of the other way around.
- The groupware can be embedded into many different types of infrastructure.
- Simply the most flexible web groupware system around.



- [home](#)
- [applications](#)
- [wiki](#)
- [support](#)
- [contact](#)

US

• • • •

## HORDE AT LINUXTAG.

The Horde Project is presenting their latest applications with a booth and a talk on [LinuxTag](#), Berlin, from May 11th to 14th. Meet us at hall 7.2a, booth 139a, or listen to [Gunnar Wrobel's talk](#) on Friday, 12pm.





### Community

Wondering what Horde is? Curious how to use one of Horde's many more advanced features? Learn more about Horde and its powerful [applications](#) with Frequently Asked Questions, Screenshots and more.



### Development

As the most flexible groupware platform in the world, Horde makes an ideal place to create your own [custom applications](#). Learn more about our feature-rich collection of web development libraries and how to get started.



### Services

More than just software. Our team of trusted professionals helps you build large installations or custom applications. Learn how our experience and technology delivers the most flexible platform to realize your grand ideas.

### Latest News

Horde 4 has been released. This is a major milestone in Horde development, packed with two years' worth of development.

IMP H4 (5.0) has been released. It bundles all, much improved, interfaces that were available as separate applications, and includes a brand new interface for smartphones.

IMP 5 has been released, integrating all functionality of DIMP. DIMP is discontinued.

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- [mybroadband.co.za](#)
- [codinghorror.com](#)
- [oho.net](#)

# Questions

Questions?

E-Mail: [wrobel@horde.org](mailto:wrobel@horde.org)

Support (Horde LLC)

E-Mail: [info@horde.org](mailto:info@horde.org)