Roundup

LINUX FORMAT
On the DVD
» Citadel 7.61
» eGroupware 1.6.002
» Horde 1.2.3

Groupware servers

To help you get rid of communication blues, **Mayank Sharma** hunts for the ideal assimilation of collaborative apps for an intranet.

How we tested...

All groupware servers mentioned in this Roundup are installed inside separate virtual machines (created via *VirtualBox*) running either Ubuntu 9.04 or Debian Lenny. Although the best way to evaluate server software is to set it up yourself, an online demo earns brownie points for the project.

The web interface plays a crucial role in the administration of server software; even more so when it's also the primary UI for users. Interface customisation is always a big issue in these circumstances.

Support for clients such as *Thunderbird* is important, and so is sharing calendars and documents. Finally, you don't want to switch groupware servers just because a new user is missing a feature, so we'll keep an eye out for which are expandable to keep up with the fluctuating needs of users.

Our selection

At the end of dimly lit hallways, beside the hypnotic hum of the servers, you'll hear a bunch of admins exchange stories about the killer migration app that saved their bacon. They're not talking about *OpenOffice.org* or *Wine*; they're talking about groupware servers.

In an organisation, productivity resides on the intranet, and a groupware or collaboration server is what makes the intranet productive. They provide critical services like email and address books, and establish communication via instant messaging.

Like all things Linux and servery, there's a whole stack of collaboration software you can put atop your Linux server. Some bundle their own mail servers and mail transfer agents, while others are programmed to work with the popular ones.

Almost all groupware servers let you import and share contacts and calendar events, and some even let you collaborate extensively on files and projects.

The standard medium for accessing your groupware account is a web browser. For common tasks such as email, and sharing contacts and appointments, the "real" groupware servers will hook up with various desktop clients across platforms, thanks to their supporting a truckload of protocols and formats such as WebDAV, GroupDAV and CalDAV.

Some groupware servers cost you nothing, while some come with support. But are the enterprise-badged servers worth the money, or do the community editions reign supreme?

> **"Some servers cost you nothing, while some come with support."**

Citadel

An old favourite tested by time, tide and community.

Citadel began life as a bulletin-board system and inspired a whole genre of BBS software known as Citadels. In its modern post-BBS avatar, it might as well do the same for groupware software.

For a completely free collaboration server app licensed under GPLv3, Citadel groupware makes some of its commercial competitors bite dust without even trying. You can use it to send emails, schedule meetings, maintain address books, set up bulletin boards and mailing lists, and exchange instant messages. And all this from inside an Ajaxified web interface with a desktop app look and feel.

The customisable web front-end to *Citadel* is called *Webcit* (not to be confused with the browser engine

> ## "Citadel is easy to administer and there's plenty of documentation."

WebKit). It enables a bubble-preview of calendar events. You can similarly preview emails as well as drag and drop messages into folders. You also get multiple views of *Citadel* apps, such as the summary view which provides an overview of new messages, tasks and items on the calender for the day.

You don't have to waste days of your life getting *Citadel* on your network. Its installation script fetches and builds the complete server from source, and will also upgrade an existing installation. *Citadel* uses the *BerkeleyDB* database for all its data storage and is proud of its BBS heritage, which is why everything in the groupware revolves around self-contained areas called rooms. You can create and use a room for exchanging IMs, or as a shared email folder, or to host a mailing list, and other things.
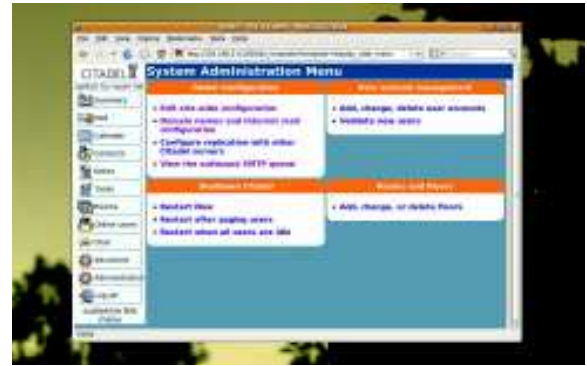
What do you get

Unlike most of its peers, Citadel comes with a standards-compliant email server built-in. The customised email server supports IMAP, POP3, and Enhanced SMTP protocols, so you can connect to it with any of the popular email clients.

The group calendaring and scheduling components use GroupDAV, which eases their synchronisation with clients. *Citadel*'s fetish for standards extends to IM components as well, and it will work with any IM client that supports the XMPP (Jabber) protocol. To enable push email for mobile users you can download and install the Funambol Citadel Connector.

Citadel is also easy to administer, and there's plenty of documentation if you can't find your way around the various settings. For example, there's detailed help on how to hook up the email component with *SpamAssassin*

> ❯ *Citadel* **can manage users spread across multiple Citadel servers in different physical locations.**

or *ClamAV* – just specify the IP address of the running server. You can also use the LDAP connector to migrate the user info from your directory server. *Citadel* enables you to delegate power to all or selected users so that they can admin certain bits and create rooms.

LINUX FORMAT Verdict

Citadel

Version: 7.50
Website: www.citadel.org
Price: Free under GPL

❯ *Around since the BBS-era,* Citadel *has more features than many modern proprietary collaborative servers.*

Rating **9/10**

Step by step: Installing Citadel

❯ Fetch prerequisites
Before you start, you need to get some libraries. On a Debian-based distro, try: **apt-get install build-essential curl g++ gettext shared-mime-info libssl-dev**. On Fedora, fetch these via *Yum*.

❯ Run Easy Install script
When the build environment is set up, fetch and execute the Easy Install script with **sudo curl http://easyinstall.citadel.org/install | sh**. The script will grab and compile packages one by one, and may take some time.

❯ Configure
Once the packages are installed, the script runs a simple configuration procedure. The critical choice is whether *Citadel* should maintain its own user database or run via a user defined database.

eGroupWare

We want to start our own business just to use this one.

Apot pourri of email, calendaring, and task management apps does not a groupware server make. So for those of you who want something tailor made for a business setup, there's *eGroupWare*. It's aimed at small to medium size businesses, but that shouldn't deter other smaller (or larger) groups from rolling out *eGroupWare*, especially since it doesn't cost you a penny to try and is available under the GPL.
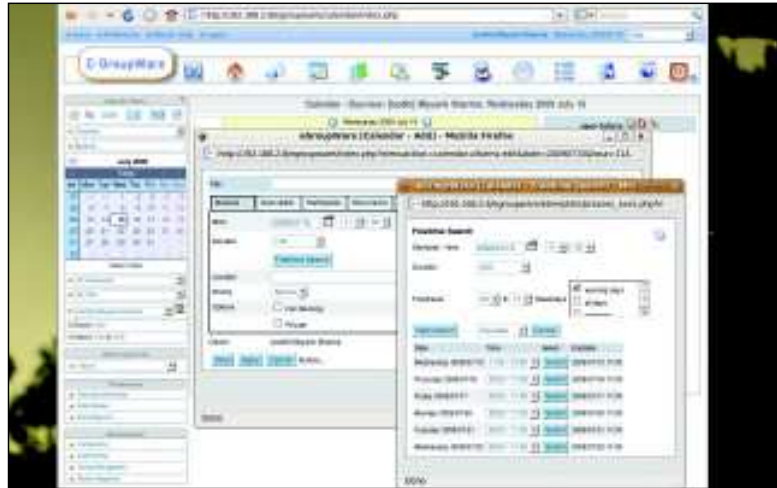
One of *eGroupWare*'s strong points is its bundle of business apps – email, calendar, appointment and contact management, address book and task management capabilities. Now throw in a few more collaboration apps like a file manager, a project manager, and components to create a commentable knowledge base and manage workflow processes through a GUI – and a wiki – and you're good to go.

Like most of its peers, *eGroupWare* packs an IMAP webmail client, but you need to plug it into a functioning mail server before you can use it. You can also share calenders, contacts and appointments using the typical clients.

Loaded to the brim

The default *eGroupWare* installation is overflowing with features. You can categorise all sorts of content and use filters and advanced search options to find any information stored on the system. The server's ability to interlink

› *eGroupWare* lets you save emails as tasks.

data across the modules is especially useful for tying things into context.

The InfoLog module will take notes, and maintain to-do lists. You can delegate responsibility of a to-do item to another user, hook up with the calender and send reminders. You can also link meetings to other data such as contacts and tasks, and you can even attach files. Best of all, when you want to address the same document to several contacts, *eGroupWare* can automatically pull in the address info from the address book.

The best thing about *eGroupWare* is the flexibility of the setup. You get to customise every aspect of the bundled modules for individual users. The administration panel lets you back up

and restore the entire groupware database with the press of a button. *eGroupWare* also packs in a comprehensive template-based SiteManager module for a more radical redesign of the server's appearance.

LINUX FORMAT Verdict

eGroupWare

Version: 1.6
Website: www.egroupware.org
Price: Free under GPL

» *Aimed at the business user, with appropriate tools that are tightly integrated into each other.*

Rating 9/10

Step by step: Installing eGroupWare

» Prepare environment
eGroupWare is your typical LAMP app, so you need a working *Apache* web server with PHP support, and a *MySQL* or a *PostgreSQL* database. You also need an SMTP server like *Postfix* and a IMAP server such as *Cyrus*.

» Grab packages
You have two options to get the *eGroupWare* packages: you can either download them via zipped tarballs from the project's SourceForge page, or you can just grab them via your distro's repository.

» Run setup
You need to run the *eGroupWare* setup wizard from your web browser – **http://localhost/egroupware/setup**. This involves setting up the admin user, and pointing the installation to your database and mail server.

Open-Xchange Server
Open for business.

Open-Xchange is one of two proprietary collaboration servers we'll look at in this Roundup. Along with multiple editions based on the proprietary version, Open-Xchange offers a GPLed "Community Edition". As is the case with most dual-licensed software, the community edition gets you no support or updates, is free for non-commercial use only, and is licensed under GPLv2. That licence applies to everything minus the browser-based front-end, which is licensed under the Creative Commons Attribution-Noncommercial-Share Alike 2.5 Generic Licence.

You can install the GPL version on Debian 4/5, SLES 10/11, and RHEL 5. It also works on a bunch of "unsupported distros" that include CentOS 5, Fedora 9, Ubuntu 8.04, and OpenSUSE 11. To ease the process, step-by-step installation guides are available for all.

Once you've got it set up, you can create mailing lists that consist of both internal and external email addresses. Open-Xchange offers email, calendars, contacts, task tracking and an infostore. The latter is one of the highlights of Open-Xchange. It enables you to share documents and keep track of them with automated version control features.

Another highlight is a special user referred to as the Context Admin. When a user is deleted, so is their personal data. But their public data from their infostore, and the public appointments that might be shared with other users on the system, are transferred to the Context Admin.

Everything in Open-Xchange is organised in folders. A public folder is created by a user and everyone has access to it, which is useful for

❯ You can use the GPLed version of Open-Xchange even in commercial environments.

❯ When a user is deleted their public data isn't zapped, which allows others to follow up their meetings and tasks.

collaboration on a team level. Then there are private folders that can be shared with particular users.

Plus and minus
The Ajax web interface is pretty slick. You can use it to drag and drop items. You also get a right-click context menu, which is useful for organising email, and plenty of keyboard shortcuts. The top panel with buttons to control a particular application, such as email or calendar, changes automatically to suit what you're viewing and when you move from one app to another.

The interface niceties extend to the built-in calendar, which lets you create and extend appointments with a mouse drag over the appropriate date and time, as well as drag and drop appointments to reschedule them. It will automatically notify all participants by email, if you choose to do so, when creating an appointment.

Like all good collaboration servers, Open-Xchange has a bunch of plugins and interfaces to make the app more accessible. Core plugins, such as those that handle LDAP and IMAP authentication, are bundled with it. Plugins you have to fetch manually include the EasyLogin plugin, which is useful for creating custom login pages.

To make Microsoft Outlook talk to your Open-Xchange server you need to cough up a few pounds for the OXtender plugin. Another proprietary plugin lets you access the server from your mobile phone via SyncML. You can use Thunderbird and Evolution to share contacts and appointments through the
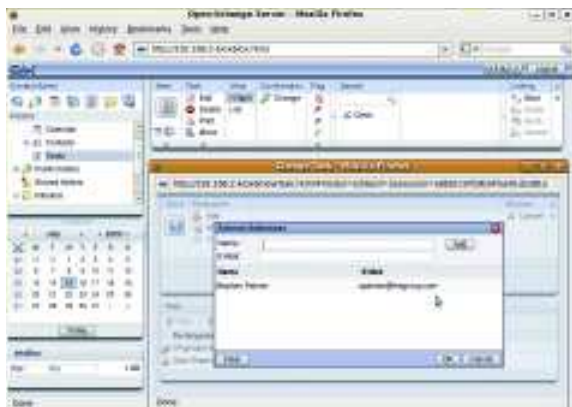
built-in WebDAV interface, vCard or CSV, and they can send and receive emails via IMAP or POP3.

The biggest setback in the community edition of Open-Xchange is a missing administration console. Unlike the Context Admin, which can carry out its duties by logging on to the GUI, there's no web-based module for administering the overall install.

Instead of the GUI login, Open-Xchange offers APIs for RMI (Remote Method Invocation), Soap (Simple Object Access Protocol), and command-line tools for administration. There's documentation for using these APIs on the Open-Xchange Wiki.

Open-Xchange doesn't include its own mail server, and you'll have to set up our own. It supports Cyrus, Dovecot and Courier mail servers. Plus there's no provision to auto-backup, restore or migrate databases.

Fortunately, none of these tasks are restricted in the GPLed version, and the process of carrying them out manually is well documented in the Wiki.

LINUX FORMAT **Verdict**

Open-Xchange

Version: 6.10
Website: www.open-xchange.com
Price: Free under GPL

❯ *For those who need the stability of a popular proprietary app, with the benefits of a GPLed software.*

Rating 6/10

Horde Groupware

Not just a demo.

Technically, *Horde* is a PHP-based web application framework. Web app developers use such frameworks that include libraries for a variety of things, and build their apps around them. *Horde Groupware* is just one such app group, developed by the Horde developers.

Instead of just being a demo app for the framework, *Horde Groupware* is a popular full-featured groupware server. Like the framework itself, *Horde Groupware* is GPL licensed, and you have the option of paying for support.

The server is available in two flavours – a plain Groupware edition with no access to email and a Webmail edition. The only difference between the two is that to use the Webmail edition you need a working POP3/IMAP email server. The web-based email client in the Webmail edition has a couple of interfaces: one uses Ajax for a more desktop-like feel (a right-click context menu, for example) and the other is designed for mobile phone use.

Apart from this, there's no difference between the two editions. Both have the same four components for calendaring, jotting notes, managing tasks, and an address book and contact manager.

In addition to filtering and searching messages, the email component lets you create distribution lists and has a WYSIWYG editor with spellchecker. The calendar component will notify about changed events via email and can integrate into *Outlook*, Apple's *iCal*, *Mozilla Sunbird* and so on. When setting up tasks, you can prioritise them, set due dates and even recurring tasks.

While you can extend the groupware with additional modules, you can't just drop them into your installation – you'll have to fiddle around with config files to tailor them to your particular setup.

> **"Horde Groupware is a popular full-featured groupware server."**

❯ **Horde Groupware can plug into your directory server.**

LINUX FORMAT Verdict

Horde Groupware

Version: 1.2.3
URL: www.horde.org/webmail
Price: Free under GPL

❯ *A good choice for those setups in which* Citadel *and* eGroupWare *would be overkill.*

Rating 7/10

Synovel CollabSuite

This proprietary solution just might be worth paying for.

The other proprietary groupware server in this Roundup is relatively new. *Synovel* hasn't been around for quite as long as the others, but it's a solid alternative and offers lots of features.
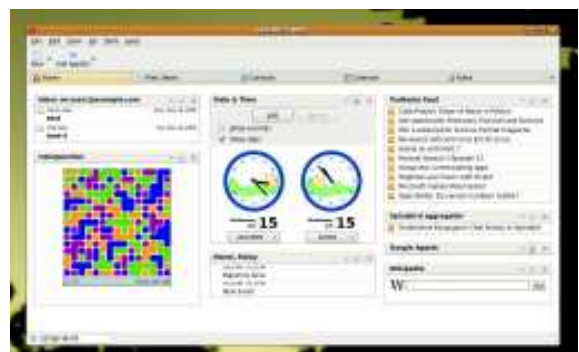
Synovel is advertised as being built on "Open Source technology" but there aren't any details of the licence, nor any source code. We tried the *Synovel* server via the *VirtualBox* image that's available for a 30-day trial.

Like the open source *Citadel*, *Synovel* includes its own custom email server supporting the usual protocols: the calendaring component uses the Caldav protocol and the IM component uses the Jabber protocol. But unlike the other collaboration servers in this Roundup, *Synovel* also includes its own cross-platform client. The client runs on both Linux and Windows, and provides integrated access to various components including email, calendaring and instant messaging.

The *Synovel CollabSuite* client has some nifty features. The tabbed interface eases switching from one app to another. It's got an advanced search to hunt for messages and contacts in address books. You can sign and encrypt emails, schedule calendar events, change your IM presence status and create multiple address books.

Administering the *Synovel* server is easily done via the web-based console. You can add and manage users, set password policies, set up mailing lists, create IM rosters, and check on the status of the running daemons. You can even add, and manage a cluster of multiple server nodes, if you have a large network spread across multiple physical locations.

> **"Unlike the other servers in the group, Synovel has a cross-platform client."**

❯ **A beta version of the client, called** *Spicebird*, **is available for free under GPL.**

LINUX FORMAT Verdict

Synovel CollabSuite

Version: 1.0
URL: www.synovel.com/collab
Price: $600/year for 25 user licences

❯ *A not-too expensive proprietary server with an impressive client.*

Rating 7/10

Groupware

The verdict

eGroupWare 9/10

First and foremost, the features, stability, documentation, and support options of the popular GPLed collaboration servers are on a par with the top proprietary enterprise-badged solutions.

Citadel and eGroupWare are ideal for all kinds of setup – from a 10-person non-profit organisation to a medium-size business. From a bird's-eye view, there's hardly anything to choose between them. Both are built around standard collaboration and groupware protocols, are equally well documented and have an active community rallying behind them. Citadel scores over eGroupWare in one aspect – it bundles a custom email server.

That's until you get a little closer. One look at eGroupWare's tools and

functionalities and you'll be sold. Every module of that server is built with a typical enterprise environment in mind. Beside the typical groupware apps, such as email and calendaring, eGroupWare successfully fits essential enterprise activities like managing

> **"One look at eGroupWare's tools and you'll be sold."**

projects and tracking tasks. The positives outweigh the inconvenience of setting up your email server.

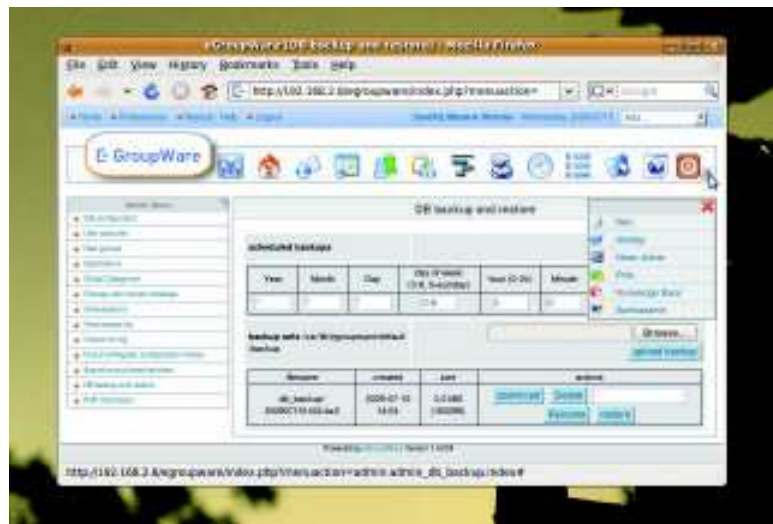And as long as you're setting up your own email server, you might as well check out Horde Groupware. It

doesn't have an online demo or a file manager, or the tight integration of eGroupWare, yet it's not missing something critical, which can't be said about Open-Xchange. Like most GPLed tools from proprietary vendors, Open-Xchange is missing more that just free support. That said, the lack of an admin GUI might hurt, and the command-line tools may take time to get used to, but in return you get a product with a good track record and an active community.

Talking about proprietary solutions, if you must have one, try the Synovel CollabSuite 30-day trial. It doesn't offer the same expansive features and tools as eGroupWare or Citadel, but it has a secret weapon in the form of the multi-platform, widget-driven integrated client.

There are a lot more groupware servers out there. Apart from those that haven't been updated for years, such as phpGroupWare, there are others like Zimbra, which was left out because of its extensive coverage elsewhere, limited community edition, and very expensive proprietary version. Then there's Kolab, a popular open source collaboration server that's poorly documented, and is too difficult to install to recommend for general usage.

❯ **If installation sounds like too much work, there's also the online demo.**

Over to you

Does the lack of a custom email server score against the groupware server? Do you use any of these servers in production? Let us know at **lxf.letters@futurenet.co.uk**.

Table of features

Name	Licence	Email built-in	Online demo	IM	Web UI	Filesharing
Citadel	GPL	✔	✘	✔	✔	✔
eGroupWare	GPL	✘	✔	✔	✔	✔
Open-Xchange	GPL	✘	✘	✘	✔	✔
Horde	GPL	✘	✘	✘	✔	✔
Synovel	Proprietary	✔	✘	✔	✘	✘