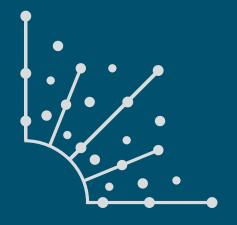
5 open source collaboration tools

A productivity guide for email, editing, and documentation

By Kevin Sonney





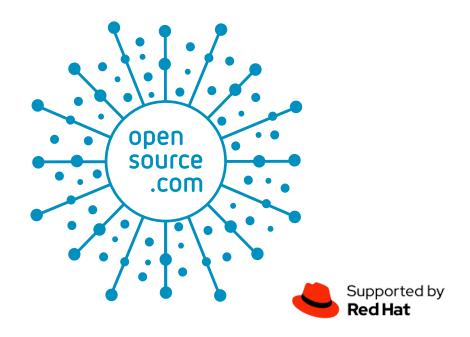
ABOUT OPENSOURCE.COM

What is Opensource.com?

OPENSOURCE.COM publishes stories about creating, adopting, and sharing open source solutions. Visit Opensource.com to learn more about how the open source way is improving technologies, education, business, government, health, law, entertainment, humanitarian efforts, and more.

Submit a story idea: opensource.com/story

Email us: open@opensource.com



KEVIN SONNEY

KEVIN SONNEY IS A TECHNOLOGY PROFESSIONAL, MEDIA PRODUCER, AND PODCASTER. A Linux Sysadmin and Open Source advocate, Kevin has over 25 years in the IT industry, with over 15 years in Open Source.

Kevin hosts the weekly Productivity Alchemy Podcast. He and his wife, author and illustrator Ursula Vernon, co-host the weekly podcast Kevin and Ursula Eat Cheap (NSFW) and routinely attend sci-fi and comic conventions. Kevin also voices Rev. Mord on The Hidden Almanac.

FOLLOW KEVIN SONNEY

Twitter: @ksonney



system

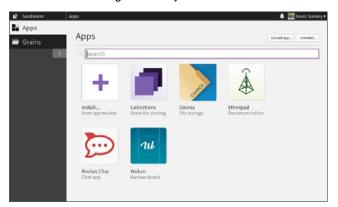
INTRODUCTION Introduction 5 **CHAPTERS** Sandstorm, an open source 6 web app platform Cypht, an open source email client 7 CryptPad, an open source collaborative 8 document editor Isotope, an open source webmail client 9 LogicalDOC, an open source document management 10

Introduction

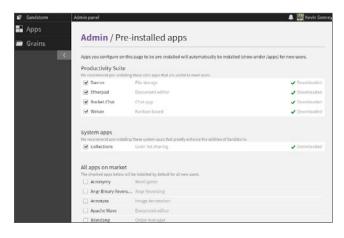
people seem to constantly be searching for ways to be more productive. The usual round of recommendations is heavily biased towards closed source and proprietary software. It doesn't have to be that way. Here are my picks for open source tools to help you be more productive with collaboration.

Sandstorm, an open source web app platform

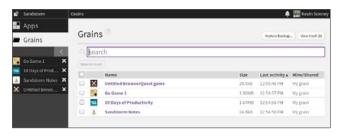
BEING PRODUCTIVE isn't just about todo lists and keeping things organized. Often it requires a suite of tools linked to make a workflow go smoothly.



Sandstorm [1] is an open source collection of packaged apps, all accessible from a single web interface and managed from a central console. You can host it yourself or use the Sandstorm Oasis [2] service—for a per-user fee.



Sandstorm has a marketplace that makes it simple to install the apps that are available. It includes apps for productivity, finance, note taking, task tracking, chat, games, and a whole lot more. You can also package your own apps and upload them by following the application-packaging guidelines in the developer documentation [3].



Once installed, a user can create grains [4]—basically containerized instances of app data. Grains are private by default and can be shared with other Sandstorm users. This means they are secure by default, and users can chose what to share with others.



Sandstorm can authenticate from several different external sources as well as use a "passwordless" email-based authentication. Using an external service means you don't have to manage yet another set of credentials if you already use one of the supported services.

In the end, Sandstorm makes installing and using supported collaborative apps quick, easy, and secure.

- [1] https://sandstorm.io/
- [2] https://oasis.sandstorm.io/
- [3] https://docs.sandstorm.io/en/latest/developing/
- [4] https://sandstorm.io/how-it-works

Cypht, an open source email client

WE SPEND A LOT OF TIME dealing with email, and effectively managing your email [1] can make a huge impact on your productivity. Programs like Thunderbird, Kontact/KMail, and Evolution all seem to have one thing in common: they seek to duplicate the functionality of Microsoft Outlook, which hasn't really changed in the last 10 years or so. Even the console standard-bearers [2] like Mutt and Cone haven't changed much in the last decade.



Cypht [3] is a simple, lightweight, and modern webmail client that aggregates several accounts into a single view. Along with email accounts, it includes Atom/RSS feeds. It makes reading items from these different sources very simple by using an "Everything" screen that shows not just the mail from your inbox, but also the newest articles from your news feeds.



It uses a simplified version of HTML messages to display mail or you can set it to view a plain-text version. Since Cypht doesn't load images from remote sources (to help maintain security), HTML rendering can be a little rough, but it does enough to get the job done. You'll get plain-text views with most rich-text mail—meaning lots of links and hard to read. I don't fault Cypht, since this is really the email senders' doing, but it does detract a little from the reading experience. Reading news feeds is about the same, but having them integrated with your email accounts makes it much easier to keep up with them (something I sometimes have issues with).



Users can use a preconfigured mail server and add any additional servers they use. Cypht's customization options include plain-text vs. HTML mail display, support for multiple profiles, and the ability to change the theme (and make your own). You have to remember to click the "Save" button on the left navigation bar, though, or your custom settings will disappear after that session. If you log out and back in without saving, all your changes will be lost and you'll end up with the settings you started with. This does make it easy to experiment, and if you need to reset things, simply logging out without saving will bring back the previous setup when you log back in.



Installing Cypht [4] locally is very easy. While it is not in a container or similar technology, the setup instructions were very clear and easy to follow and didn't require any changes on my part. On my laptop, it took about 10 minutes from starting the installation to logging in for the first time. A shared installation on a server uses the same steps, so it should be about the same.

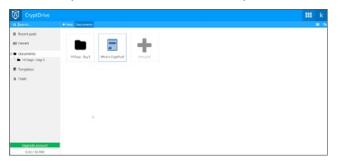
In the end, Cypht is a fantastic alternative to desktop and web-based email clients with a simple interface to help you handle your email quickly and efficiently.

- https://opensource.com/article/17/7/email-alternativesthunderbird
- [2] https://opensource.com/life/15/8/top-4-open-sourcecommand-line-email-clients
- [3] https://cypht.org/
- [4] https://cypht.org/install.html

CryptPad, an open source collaborative document editor

WE ALREADY TALKED about Joplin [1], which is good for keeping your own notes but—as you may have noticed—doesn't have any sharing or collaboration features.

CryptPad [2] is a secure, shareable note-taking app and document editor that allows for secure, collaborative editing. Unlike Joplin, it is a NodeJS app, which means you can run it on your desktop or a server elsewhere and access it with any modern web browser. Out of the box, it supports rich text, Markdown, polls, whiteboards, kanban, and presentations.



The different document types are robust and fully featured. The rich text editor covers all the bases you'd expect from a good editor and allows you to export files to HTML. The Markdown editor is on par with Joplin, and the kanban board, though not as full-featured as Wekan [3], is really well done. The rest of the supported document types and editors are also very polished and have the features you'd expect from similar apps, although polls feel a little clunky.



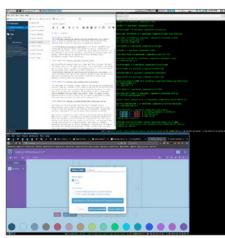
CryptPad's real power, though, comes in its sharing and collaboration features. Sharing a document is as simple as getting the sharable URL from the "share" option, and CryptPad supports embedding documents in iFrame tags on other websites. Documents can be shared in Edit or View mode with a password and with links that expire. The built-in chat allows editors to talk to each other (note that people with View access can also see the chat but can't comment).



All files are stored encrypted with the user's password. Server administrators can't read the documents, which also means if you forget or lose your password, the files are unrecoverable. So make sure you keep the password in a secure place, like a password vault [4].

When it's run locally, CryptPad is a robust app for creating and editing documents. When run on a server, it becomes an excellent collaboration platform for multi-user document creation and editing. Installation took less than five

minutes on my laptop, and it just worked out of the box. The developers also include instructions for running CryptPad in Docker, and there is a community-maintained Ansible role for ease of deployment. CryptPad does



not support any third-party authentication methods, so users must create their own accounts. CryptPad also has a community-supported hosted version if you don't want to run your own server.

- [1] https://opensource.com/article/19/1/productivity-tool-joplin
- [2] https://cryptpad.fr/index.html
- [3] https://opensource.com/article/19/1/productivity-toolwekan
- [4] https://opensource.com/article/18/4/3-passwordmanagers-linux-command-line

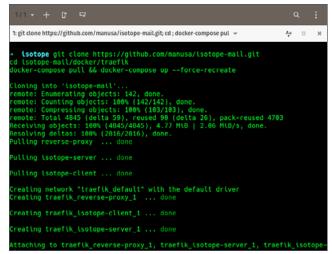
Isotope, an open source webmail client

AS WE DISCUSSED in the Cypht chapter, we all spend a whole

lot of time dealing with email. There are many options for dealing with it, and I've spent hours upon hours trying to find the best email client that works for me. I think that is an important distinction: What works for me doesn't always work for everyone else. And sometimes what works for me is a full client like Thunderbird [1], sometimes it is a console client like Mutt [2], and sometimes it's a web-based interface like Gmail [3] or RoundCube [4].



Isotope [5] is a locally hosted, web-based email client. It is exceptionally lightweight, uses IMAP exclusively, and takes up very little disk space. Unlike Cypht, Isotope has full HTML mail support, which means there are no issues displaying rich-text only emails.

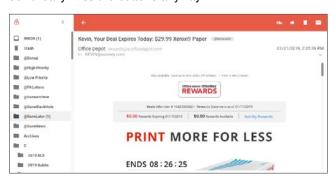


Installing Isotope is very easy if you have Docker [6] installed. You only need to copy the commands from the documentation into a console and press Enter. Point a browser at **localhost** to get the Isotope login screen, and entering

your IMAP server, login name, and password will open the inbox view.



At this point, Isotope functions pretty much as you'd expect. Click a message to view it, click the pencil icon to create a new message, etc. You will note that the user interface (UI) is very minimalistic and doesn't have the typical buttons for things like "move to folder," "copy to folder," and "archive." You move messages around with drag and drop, so you don't really miss the buttons anyway.



Overall, Isotope is clean, fast, and works exceptionally well. Even better, it is under active development (the most recent commit was two hours before I wrote this chapter), so it is constantly getting improvements. You can check out the code and contribute to it on GitHub [7].

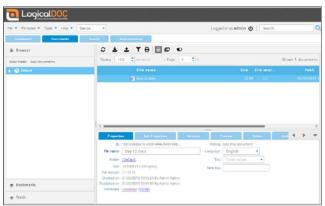
- [1] https://www.thunderbird.net/en-US/
- [2] http://www.mutt.org/
- [3] https://mail.google.com/
- [4] https://roundcube.net/
- [5] https://blog.marcnuri.com/isotope-mail-client-introduction/
- [6] https://www.docker.com/
- [7] https://github.com/manusa/isotope-mail

LogicalDOC, an open source document management system

PART OF BEING PRODUCTIVE is being able to find what you need when you need it. We've all seen directories full of similar files with similar names, a result of renaming them every time a document changes to keep track of all the versions. For example, my wife is a writer, and she often saves document revisions with new names before she sends them to reviewers.

```
→ Articles is *.docx
Day-12-beta1.docx Day-12-draft1.docx
Day-12-beta2.docx Day-12-draft2.docx
Day-12-beta3.docx Day-12-draft3.docx
Day-12-beta3.docx Day-12-draft4.docx
Day-12.docx Day-12-draft4.docx
→ Articles
```

A coder's natural solution to this problem—Git or another version control tool—won't work for document creators because the systems used for code often don't play nice with the formats used by commercial text editors. And before someone says, "just change formats," that isn't an option for everyone [1]. Also, many version control tools are not very friendly for the less technically inclined. In large organizations, there are tools to solve this problem, but they also require the resources of a large organization to run, manage, and support them.



LogicalDOC CE [2] is an open source document management system built to solve this problem. It allows users to check in, check out, version, search, and lock document files and keeps a history of versions, similar to the version control tools used by coders.

LogicalDOC can be installed [3] on Linux, MacOS, and Windows using a Java-based installer. During installation, you'll be prompted for details on the database where its data will be stored and have an option for a local-only file store. You'll get the URL and a default username and password to access the server as well as an option to save a script to automate future installations.

After you log in, LogicalDOC's default screen lists the documents you have tagged, checked out, and any recent notes on them. Switching to the Documents tab will show the files you have access to. You can upload documents by selecting a file through the interface or using drag and drop. If you upload a ZIP file, LogicalDOC will expand it and add its individual files to the repository.



Right-clicking on a file will bring up a menu of options to check out files, lock files against changes, and do a whole host of other things. Checking out a file downloads it to your local machine where it can be edited. A checked-out file cannot be modified by anyone else until it's checked back in. When the file is checked back in (using the same menu), the user can add tags to the version and is required to comment on what was done to it.



Going back and looking at earlier versions is as easy as downloading them from the Versions page. There are also import and export options for some third-party services, with Dropbox [4] support built-in.

Document management is not just for big companies that can afford expensive solutions. LogicalDOC helps you keep track of the documents you're using with a revision history and a safe repository for documents that are otherwise difficult to manage.

- [1] http://www.antipope.org/charlie/blog-static/2013/10/whymicrosoft-word-must-die.html
- [2] https://www.logicaldoc.com/download-logicaldoccommunity
- [3] https://docs.logicaldoc.com/en/installation
- [4] https://dropbox.com/