UnPLUGging From Freemium File Hosting With ownCloud

Searching for Privacy & Security in the Era of Big Data

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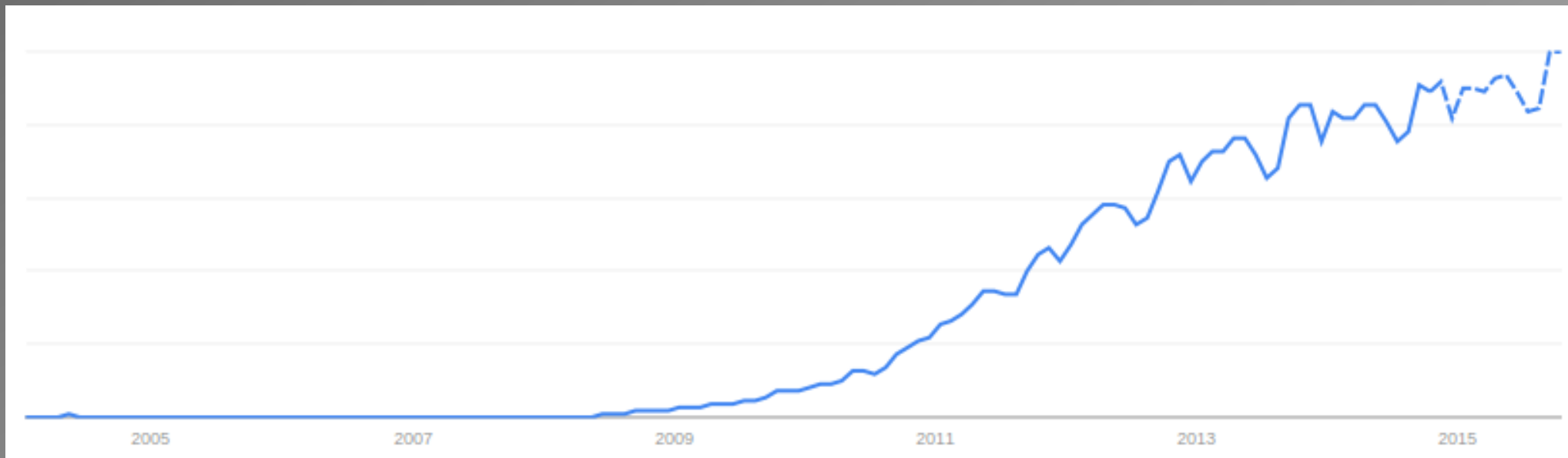
It's been a long time coming...

Camp KDE 2010 Keynote Speech
KDE and the Cloud
Frank Karlitschek

…but I know a change is gonna come

- Drive has 240 million users!
- The cloud trend is real
- The cloud trend will continue

Google Trends: "dropbox"

If this isn't for you, I'm sorry...

- Even if **you** don't use Dropbox, Google, Box, or another such service...
  - Family
  - Friends
  - Co-workers
- "This affects all of us, man. Our basic freedoms!"
- … there is a command-line client
  - owncloudcmd

We've all lost something along the way

Why should I use ownCloud?

- Control
- Privacy
- Security

What is it? What Technologies?

- ownCloud is a file hosting solution.

- ownCloud is AGPLv3

- PHP & JavaScript

- SabreDAV: CalDAV/CardDAV

- OpenID/LDAP

- PDF.js

- ODF

- Mozilla Sync

- csync

What services does it provide?

- Storage, syncing, and sharing
- Users, groups, quotas
- Versioning/undelete :)
- Calendar
- Contacts
- Bookmark sync
- Collaborative ODF Editor
- Photo gallery

- Web interface
- Desktop client (cross-platform)
- Android & iOS

- External storage
  - Dropbox
  - Google
  - FTP
- GNOME & KDE integration

Recent features

- Server-to-server shares
- Responsive WebUI
- User/group sharing of external storage

- Encrypted collaboration across servers

- Configurable e-mail notifications

What doesn't it do?

- Make PHP safer (ha!)
- Client-side encryption
  - Mega/SpiderOak
  - Server must be "trusted"
- Disk/file system encryption is up to the admin
- No spreadsheets (yet!)
- email (duh!)
  - An "app" is available to hook up to a mail server
- File de-duplication
- Replace Plex/MB3 (3rd party "apps")

How to set it up?

- ownCloud uses the OBS
- Packages are available for Debian, Ubuntu, CentOS, Fedora, RHEL, OpenSUSE, and SLE
- Apache, Nginx, lighttpd, Hiawatha, Yaws
- MySQL/MariaDB, SQLite, PostgreSQL, Oracle
- FreeBSD/FreeNAS with jails and ZFS too!
- You can always set it up from scratch

Hardening ownCloud

- OS security updates

- Issue new certificate

- Configure apache

    - SSL redirection, set Strict-Transport-Security, etc

- Configure ssl.conf

    - Forward secrecy, modern ciphers

- Fail2Ban

- Some help...

Thank you!

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Links from Q&A/Discussion

- ownCloud Demo

- Increasing file size limit and big files

- Raspberry Pi + ownCloud on Raspbian Wheezy

- GNU+Linux on Acer C720 Chromebook

  - Arch C720 Chromebook Docs

  - Bodhi Linux on Acer C720

- Ignoring files with the sync client (section 3.3.5)

- ownCloud music app

- Apparently copying files into the data folder manually is now a no-no (sorry to whomever I said this would work)

- Synchronizing calendar and contacts with iOS, Android, KDE,

- Free ownCloud Android client available via F-Droid