

# File services

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- Centralized remote file storage.
- Proprietary protocols.
- File Up- and Download.
- Multi client synchronization.
- Network file system support.
- Ubiquitous access.

# Customer demands

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- Integrated backup.
- Versioning.
- Sharing on user / group level.
- Secure access, Encryption
- Consistent availability.
- Federation support.

# Driving factors

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- Local hardware does not scale:
  - Systems interoperability
- Storage as a service
- Economy of scale: Cheap hardware, distributed system

# Selected cloud file services

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- Google Drive
- Dropbox
- OneDrive
- iCloud Drive
- Box
- Amazon Cloud Drive

# Selected self hosting products

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- Nextcloud, Owncloud
- Seafile
- Cozy
- Resilio

# Nextcloud features

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- Open source (PHP)
- Sync clients
- End-to-end encryption support
- Full text search
- Plugin extendability
  - CardDav
  - CalDav
  - LDAP support

# Lightning integration

The screenshot displays the Lightning integration interface within a web browser. The main window is titled "First Account" and "Calendar". The menu bar includes "File", "Edit", "View", "Go", "Message", "Events and Tasks", "Tools", and "Help". The toolbar contains "Synchronise", "Event", "Task", "Edit", and "Delete".

The calendar view is set to "Multiweek" and shows the period from "23 February – 22 March 2014". The days of the week are listed as Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, and Saturday. The calendar grid shows dates from 23 Feb to 15 Mar. Events are displayed as colored blocks: a red "10:00 Meeting" on Tuesday, a green "10:00 Phone C..." on Wednesday, and a blue "10:00 Visit Sup..." on Thursday.

On the right side, there is a sidebar with "Events" and a "New Event" button. The sidebar shows the current date as "4 Tue" and "Mar 2014, CW 9". It lists events for "Today" (10:00 Meeting), "Tomorrow" (10:00 Phone Call), and "Soon" (06 March 2014 10:00 Visit Supplier).