File services

- Centralized remote file storage.

- Proprietary protocols.

- File Up- and Download.

- Multi client synchronization.

- Network file system support.

- Ubiquitous access.

Customer demands

- Integrated backup.

- Versioning.

- Sharing on user / group level.

- Secure access, Encryption

- Consistent availability.

- Federation support.

Driving factors

- Local hardware does not scale:

  - Systems interoperability

- Storage as a service

- Economy of scale: Cheap hardware, distributed system

Selected cloud file services

- Google Drive
- Dropbox
- OneDrive
- iCloud Drive

- Box
- Amazon Cloud Drive

Selected self hosting products

- Nextcloud, Owncloud

- Seafile

- Cozy

- Resilio

Nextcloud features

- Open source (PHP)

- Sync clients

- End-to-end encryption support

- Full text search

- Plugin extendability

  - CardDav

  - CalDav

- LDAP support

Lightning integration