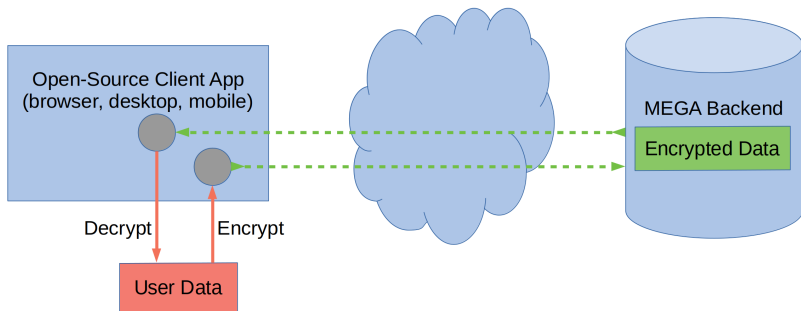# A quick intro to MEGA's open-source SDK
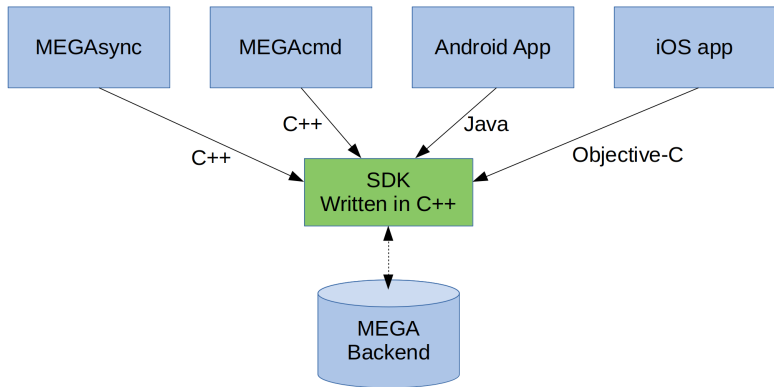
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What is MEGA?

- MEGA is a cloud storage provider using end-to-end encryption
- The encryption key is in the user's hand (their password)
- MEGA is all about the user's privacy

What is MEGA's SDK?

- A C++ layer to fully control your MEGA account

- Common functionality shared across all native apps

- Provides bindings to Objective-C, Java, Perl, Python, etc

- Abstracts: Encyrption, account management, networking, fileystem access, synchronization, etc

- Two parts: *Core* and *Intermediate Layer* (MegaApi)

What is MEGA's SDK? (cont)


```
https://github.com/meganz/sdk
```

The SDK's API

```
class MegaApi;   // main entry point
```

- ▶ Every instance spins up a worker thread processing events
- ▶ MegaApi functions are either synchronous or asynchronous
- ▶ An async function enqueues the request and processes it on the SDK thread
- ▶ Async results are communicated through a listener interface

```
// For example:
void MegaApi::login(const char* email, const char*
    password, MegaRequestListener *listener = NULL);
```

Demo time

Problem: List all files and directories in your MEGA account.

Simple command-line tool:
https://github.com/bloomen/list-mega-account

In a nutshell:

- ▶ Log into account
- ▶ Fetch all remote nodes
- ▶ Print all files and directories
- ▶ Log out