# MySocials Libraries: Unified Access to Services of Social Networks

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# Problem Domain



Girlfriend     Boss     School friends

VKontakte     Facebook     Odnoklassniki
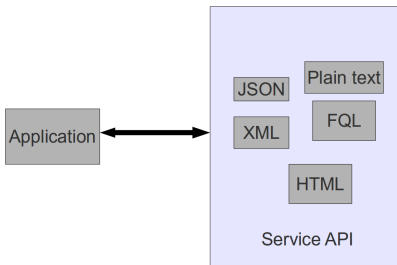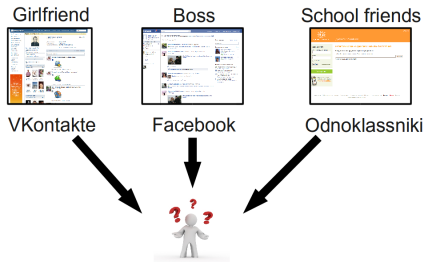
- **User view:**
  - ▶ Different networks (VKontakte, Facebook, etc.)
  - ▶ Different services (Chat, Image exchange, etc.)
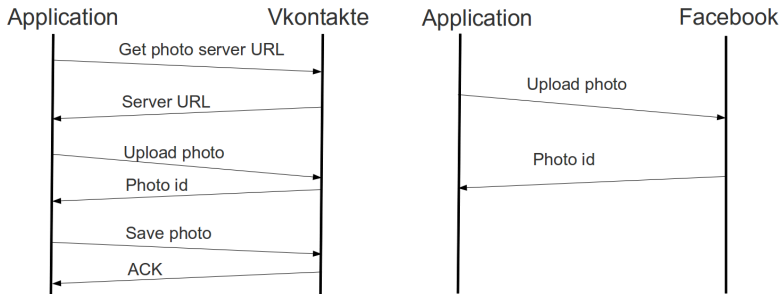  - ▶ Cross-service collaboration

- **Application view:**
  - ▶ Different API implementations
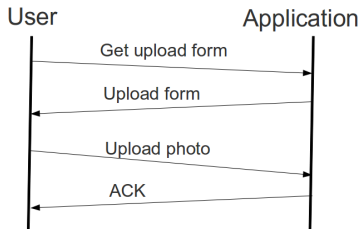  - ▶ Different usage scenarios
  - ▶ Service usage restrictions

JSON   Plain text

XML   FQL

Application

HTML

Service API

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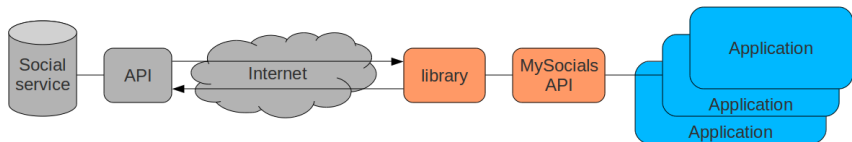# Example of use case: uploading photos
**Application view:**



**User view:**

# The idea of library for social network



- Common API for applications
- Using services API to access to data
- Simultaneous support of several applications using "account id"
- Independently fulfills authorization and CAPTCHA process requests
- Supports application-defined or system proxy

# MySocials API

- Flexible format, based on XML
- Base unit functions
- Functions are divided into classes:

| Name of the class | Description |
|---|---|
| **settings** | Class for processing driver settings |
| **profile** | Class for processing user profiles |
| **friends** | Class for processing friends |
| **messages** | Class for processing personal messages |
| **photos** | Class for processing images and albums |
| **audio** | Class for processing audio files |

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# Architecture
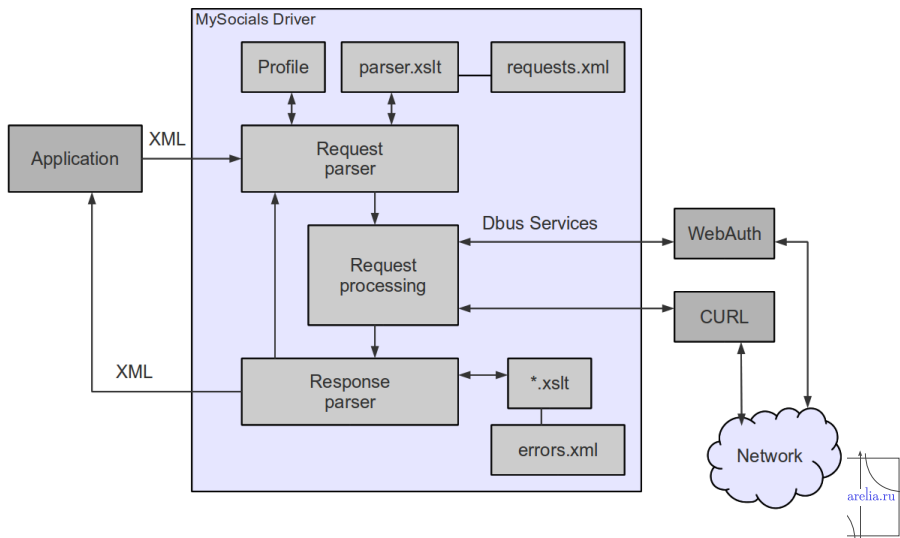
# WebAuth - web-authorization tool

- No direct access to UI from library
- Authorization through web-interface



Project page: `http://oss.fruct.org/wiki/Webauth`

# Library template

**Template:**

- base logic of the library
- network functions
- interaction with WebAuth
- interface functions
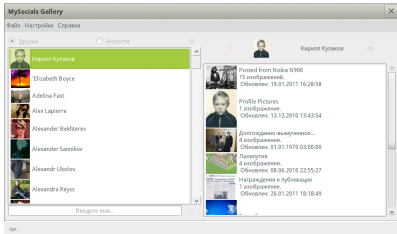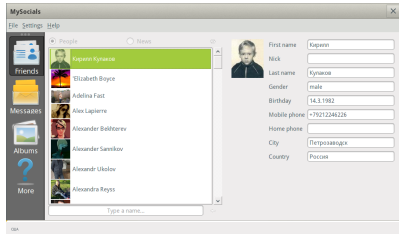- work with user profiles

**Library:**

- xslt parsers
- service errors description
- config files
- processing features of the service

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# MySocials applications

- **MySocials** http://oss.fruct.org/wiki/MySocials
- **MySocials Gallery** http://mgallery.garage.maemo.org
- **Sharing plugin for maemo5**
  http://vkontakte-photo.garage.maemo.org
- **QMF-vkontakte**
  http://qmf-vkontakte.garage.maemo.org
- **QMF-facebook** http://qmf-facebook.garage.maemo.org
- **Vk-Telepathy** http://oss.fruct.org/wiki/VkTelepathy

# Code metrics

| METRICS | Template | Libmsavk | Libmsafb | Libmsafl | Libmsamm |
|---|---|---|---|---|---|
| **LOC** | 1192 | 188 | 183 | 152 | 178 |
| **Comments** | 507 | 152 | 154 | 148 | 148 |
| **XSLT files** | 4 | 45 | 34 | 23 | 24 |
| **Supported methods** | 3 | 31 | 26 | 16 | 18 |

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# Links

- **Project wiki:** `http://oss.fruct.org/wiki/MySocials`
- **Open source:** `http://gitorious.org/mysocials`
- **Obs:** `https://build.opensuse.org/project/show?project=home:mysocials`
  `https://build.pub.meego.com/project/show?project=home:kulakov`
- **Extras-devels:** `http://maemo.org/packages/view/{libmsavk, libmsafb, libmsafl, libmsamm}`

Please, send your comments to
`maemo-mysocials@cs.karelia.ru`
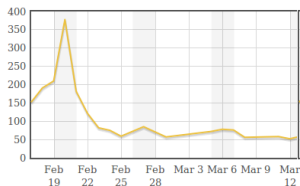and bugs to `http://oss.fruct.org/bugzilla/`

# Statistics

**Maemo extras-devel repository**

- libmsavk - 3461 (since Sep'10)
- libmsafb - 3034 (since Nov'10)
- libmsafl - 658 (since Feb'11)
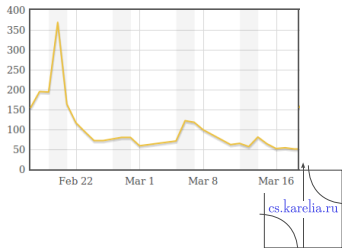- libmsamm - 281 (since Mar'11)

**Project history**

- v0.1 - part of MySocials project
- v0.2 - separate library
- v0.3 - using new API, facebook driver
- v0.4 - driver template, new services

libmsavk



libmsafb

# Future plans

- Libraries for other social networks
  - MySpace
  - Photobucket
  - LastFm
  - Picasa
- WebAuth
  - processing captcha requests
  - save login and password by user request
  - title page for authorization
- Upgrade MySocials API
  - add support of audio and video
  - request optimization

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**Thank you for your attention!**

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