

# Libraries for VKontakte and Facebook Clients: API-based approach

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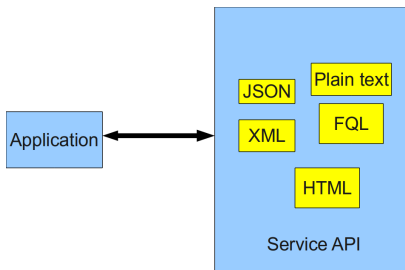
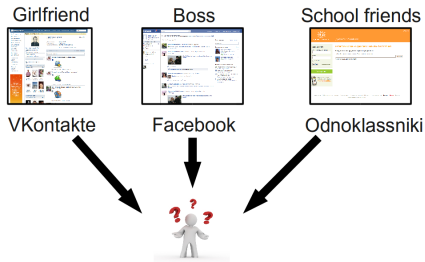
8<sup>th</sup> FRUCT conference, November 09–12, Lappeenranta, Finland

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# Problem Domain



## ■ User view:

- ▶ Different networks (VKontakte, Facebook, etc.)
- ▶ Different services (Chat, Image exchange, etc.)
- ▶ Cross-service collaboration

## ■ Application view:

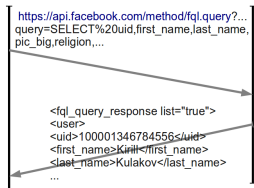
- ▶ Different API implementations
- ▶ Different usage scenarios
- ▶ Service usage restrictions



# Example of use case: get profile

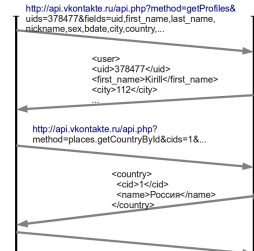
Application

Facebook



Application

VKontakte



## ■ Facebook:

- ▶ Using Facebook query language
- ▶ Single request for any data

## ■ VKontakte:

- ▶ Need several requests
- ▶ Separate requests to convert internal IDs to text

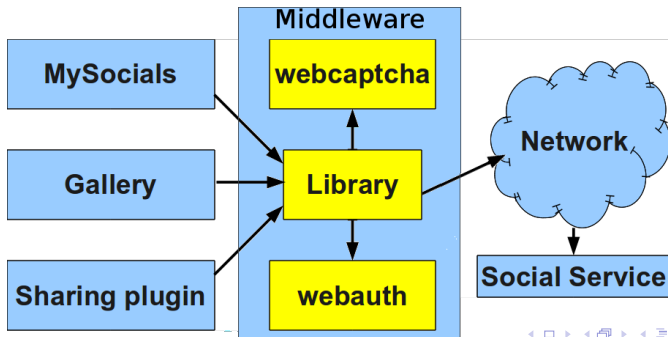
## ■ Common problems:

- ▶ Each request is separate
- ▶ Authorization data may expired during request
- ▶ "Too many requests" error
- ▶ Service may return internal error.



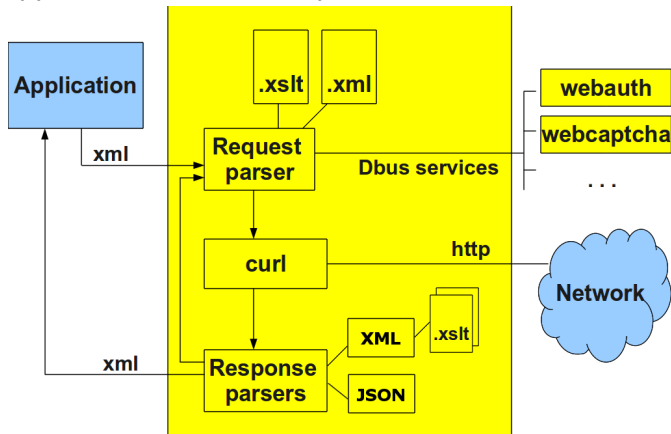
# MySocials API

- Flexible format, based on XML
- Functions are divided into classes (friends, messages, etc.)
- Simultaneous support of several applications using “account id”
- Independently fulfills authorization and CAPTCHA process requests
- Supports application-defined or system proxy



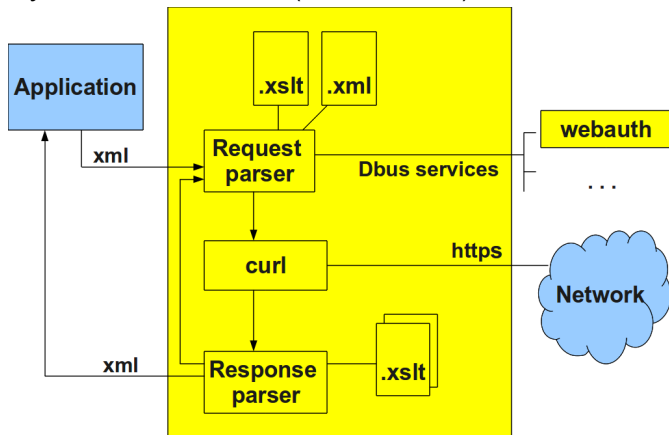
# Library for VKontakte social network

- New version uses vkontakte API (old — userAPI)
- Sequence of XSLT conversions
- Support JSON data in response



# Library for Facebook social network

- Using FQL - Facebook Query Language
- Fast multirequests - less data transfers
- Only XSLT conversions (XML to XML)



## Code metrics

<b>METRICS</b>	<b>Libvkontakte</b>	<b>Libfacebook</b>
<b>LOC</b>	1606	1318
<b>Comments</b>	1275	796
<b>XSLT files</b>	33	24
<b>XSLT size</b>	89Kb	79Kb





# Project timeline

MySocials

**FRUCT 7**

Libvkontakte +  
Userapi (JSON)

Sharing plugin

Libvkontakte +  
vkontakte API (XML)

**FRUCT 8**

Gallery

libfacebook

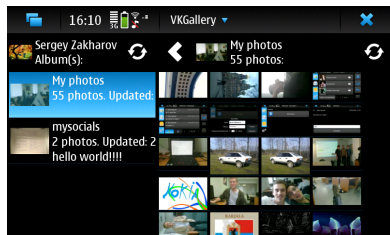
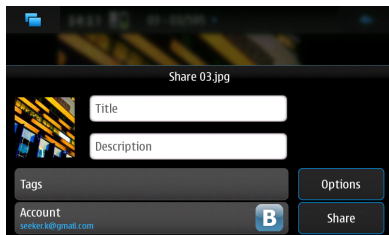
# New applications and plugins

**Sharing plugin** <http://vkontakte-photo.garage.maemo.org>

- Share images to VKontakte service
- Integrating to standard Maemo image viewer
- Work similar Facebook sharing plugin

**MySocials Gallery** <http://mgallery.garage.maemo.org>

- Show images from social services
- Friends album navigation
- Minimal network activity



# Plans and links

## Future plans

- MySocials + Gallery = new MySocials
- Libraries for social networks (Flickr, mail.ru)
- Add support of multimedia (audio, video)

## Useful links

- MySocials project wiki:  
`http://oss.fruct.org/wiki/MySocials`
- Open source: `http://gitorious.org/mysocials`
- Extras-levels: `http://maemo.org/packages/view/{libvkontakte,libfacebook}`

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





# Thank you for your attention

