

SmartScribo Blog Processor for Multi-Blogging in Smart Spaces

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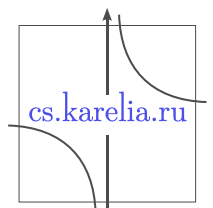
Petrozavodsk State University
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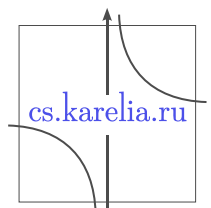
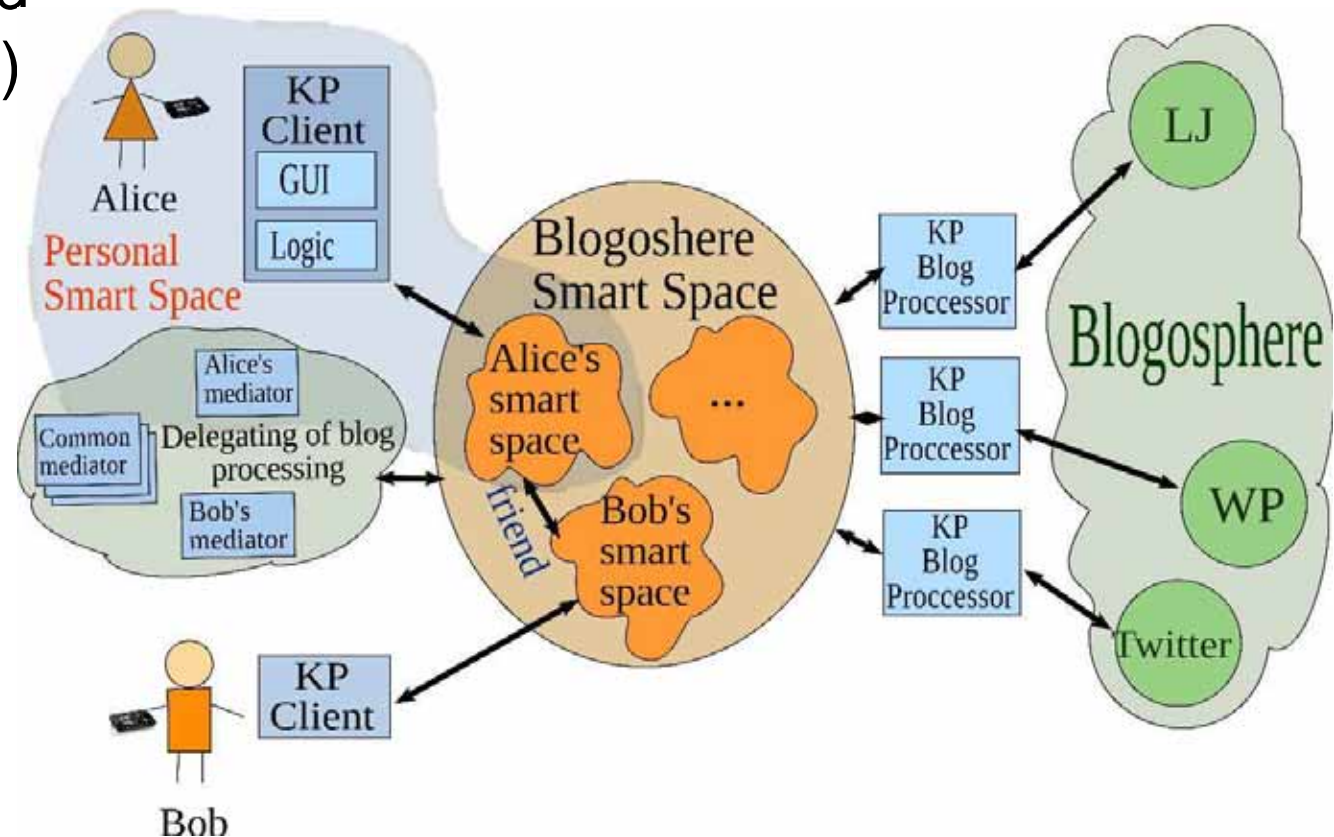
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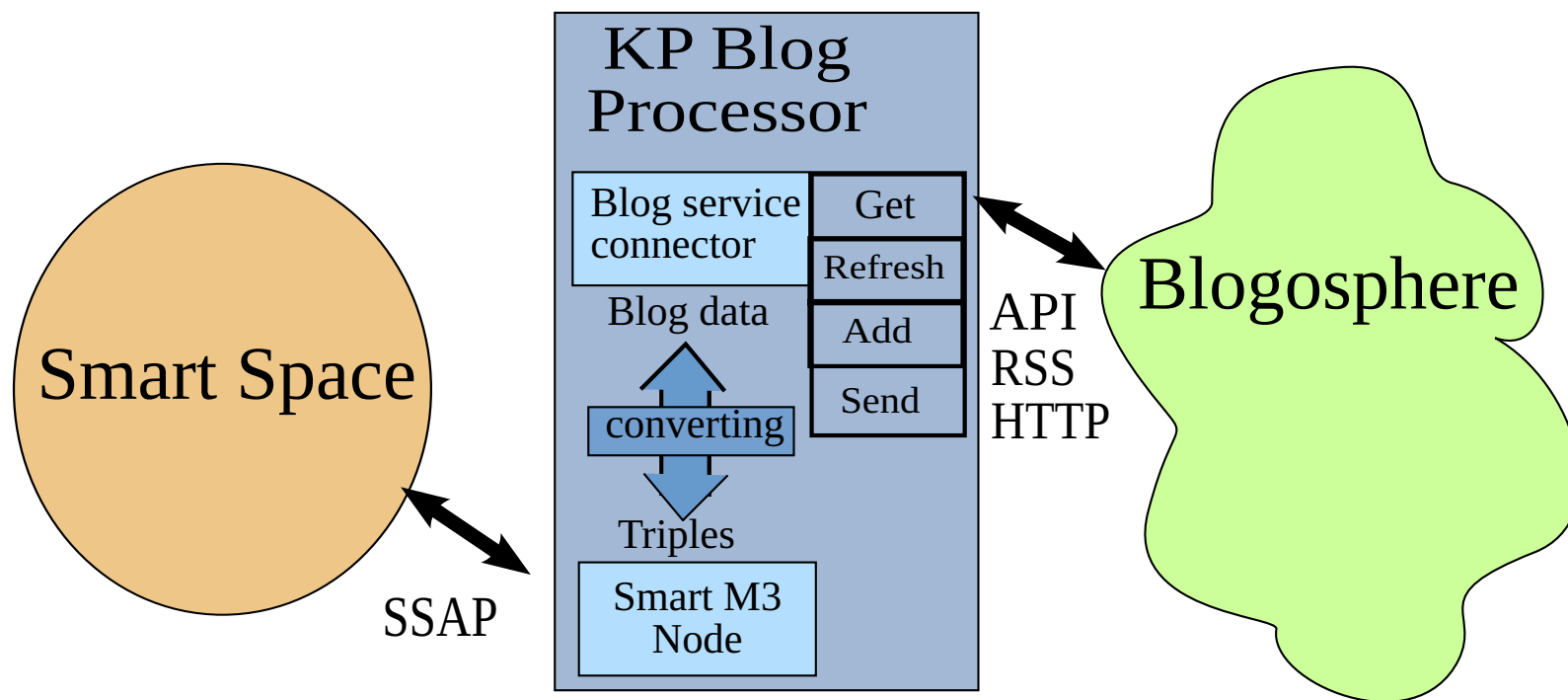


Smart-M3 Application for Advanced Blogging

- Blogosphere is shared (dynamically, partially) in the smart space
- User-related blogs from many blog-services
- Many users, collaborative or not
- Many client devices, mobile or not
- Synchronization by notifications (subscription)
- Blog Processor (BP) is a synchronizer, invisible to users

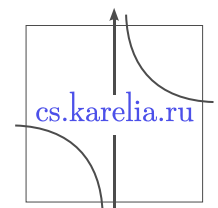


SmartScribo Blog Processor

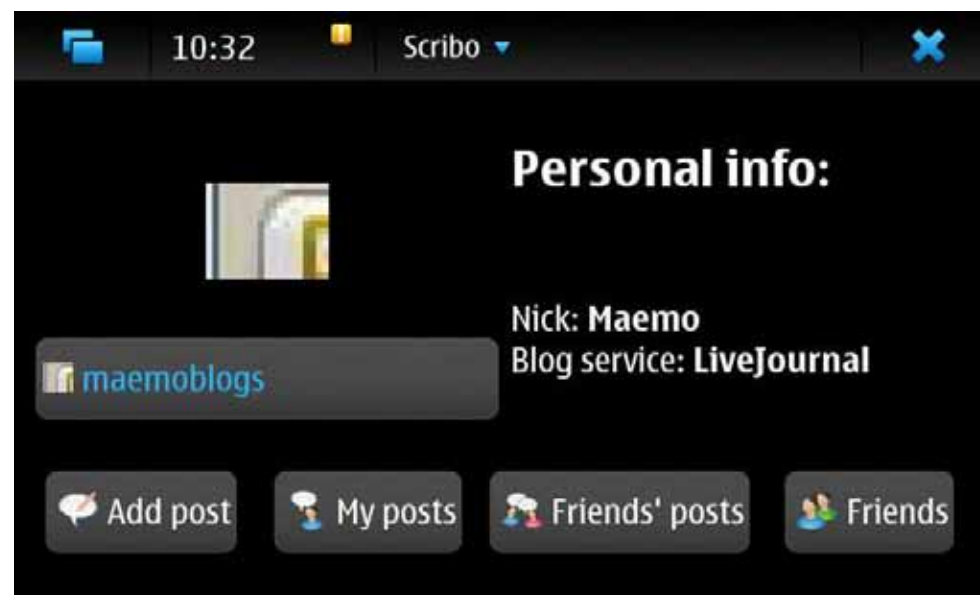


Initial SmartScribo release: a basic blog processor for LiveJournal

- accounts, posts, comments
- LiveJournal API, Python, Linux
- low-level Smart-M3 KP interface (KPI)

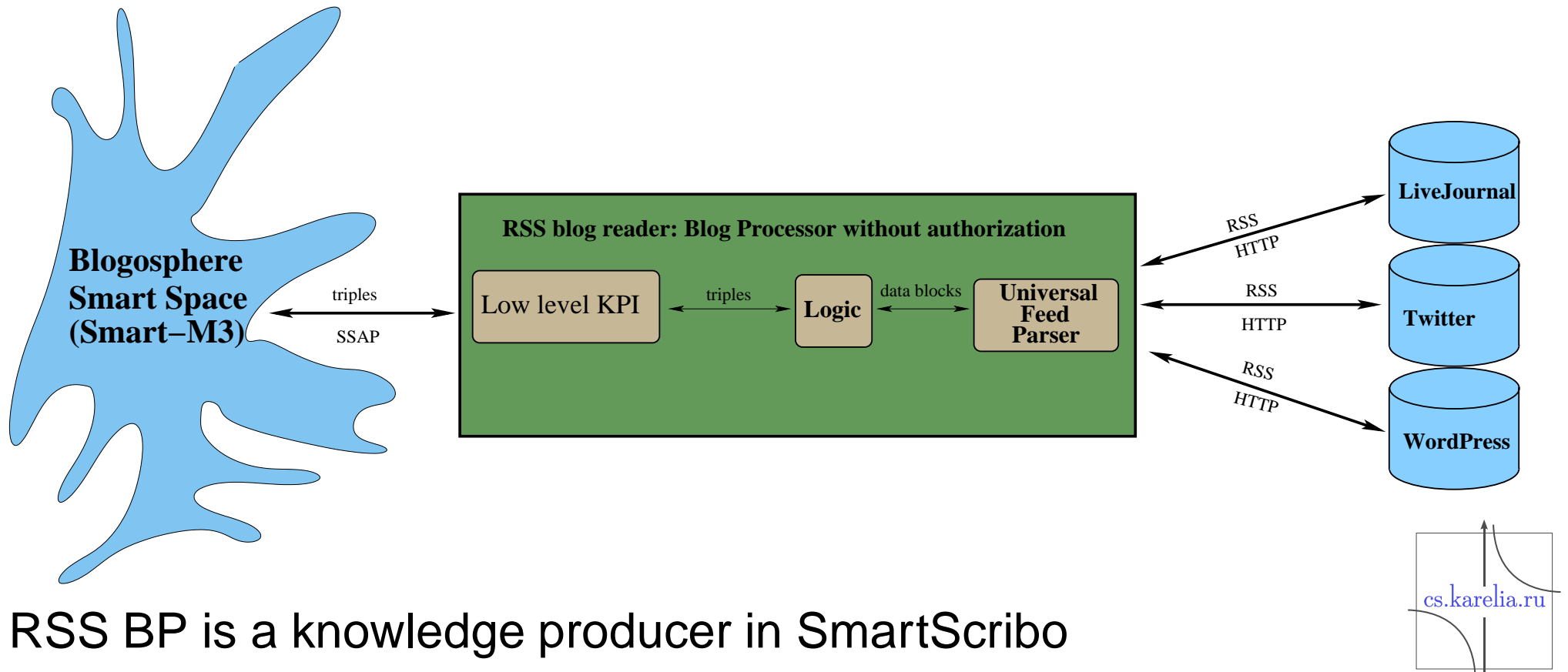


Accessing LiveJournal (Maemo5 client, N900)



RSS Format for Blogging

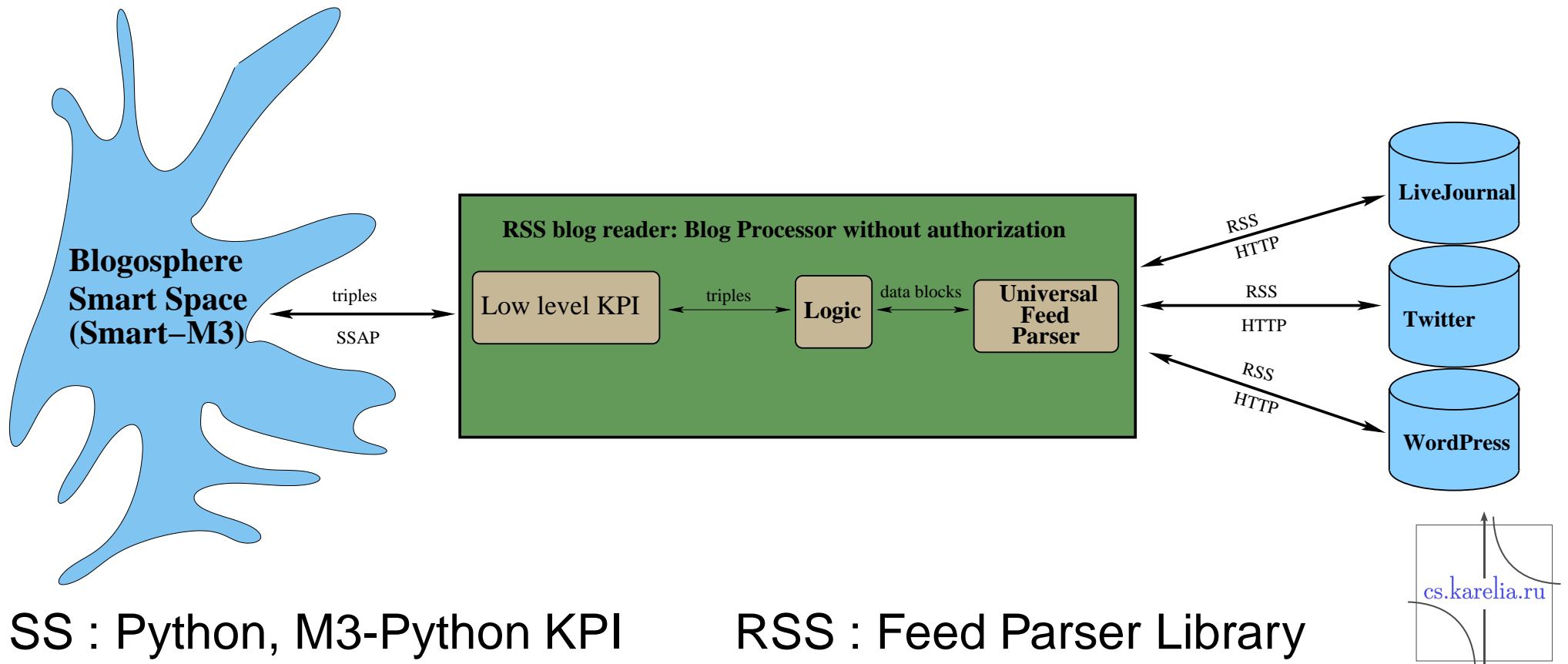
- Read access only
- No account is needed; mere browsing and reading
- Supported by many blog-services



RSS BP is a knowledge producer in SmartScribo

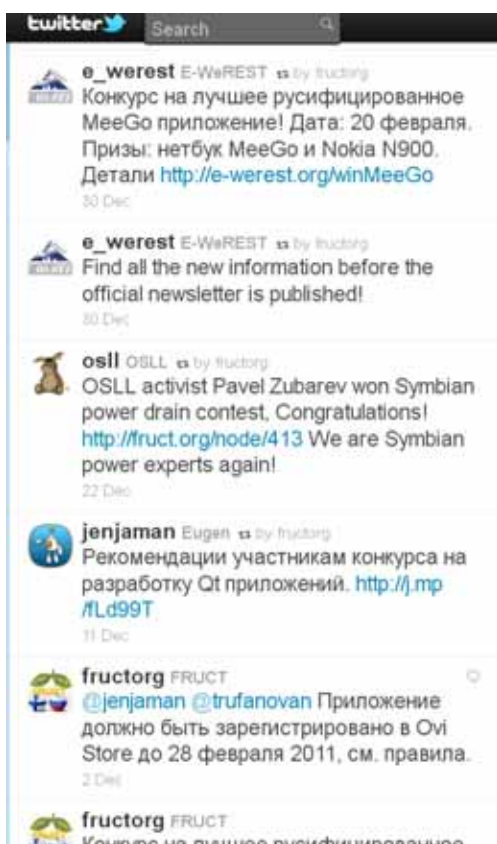
Basic Functionality

- receive user profile: information about blog owner/author
- receive posts for a given blog
- receive comments for a given post

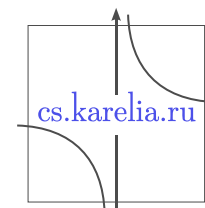


Microblogging Service

twitter

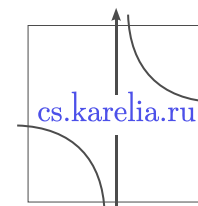
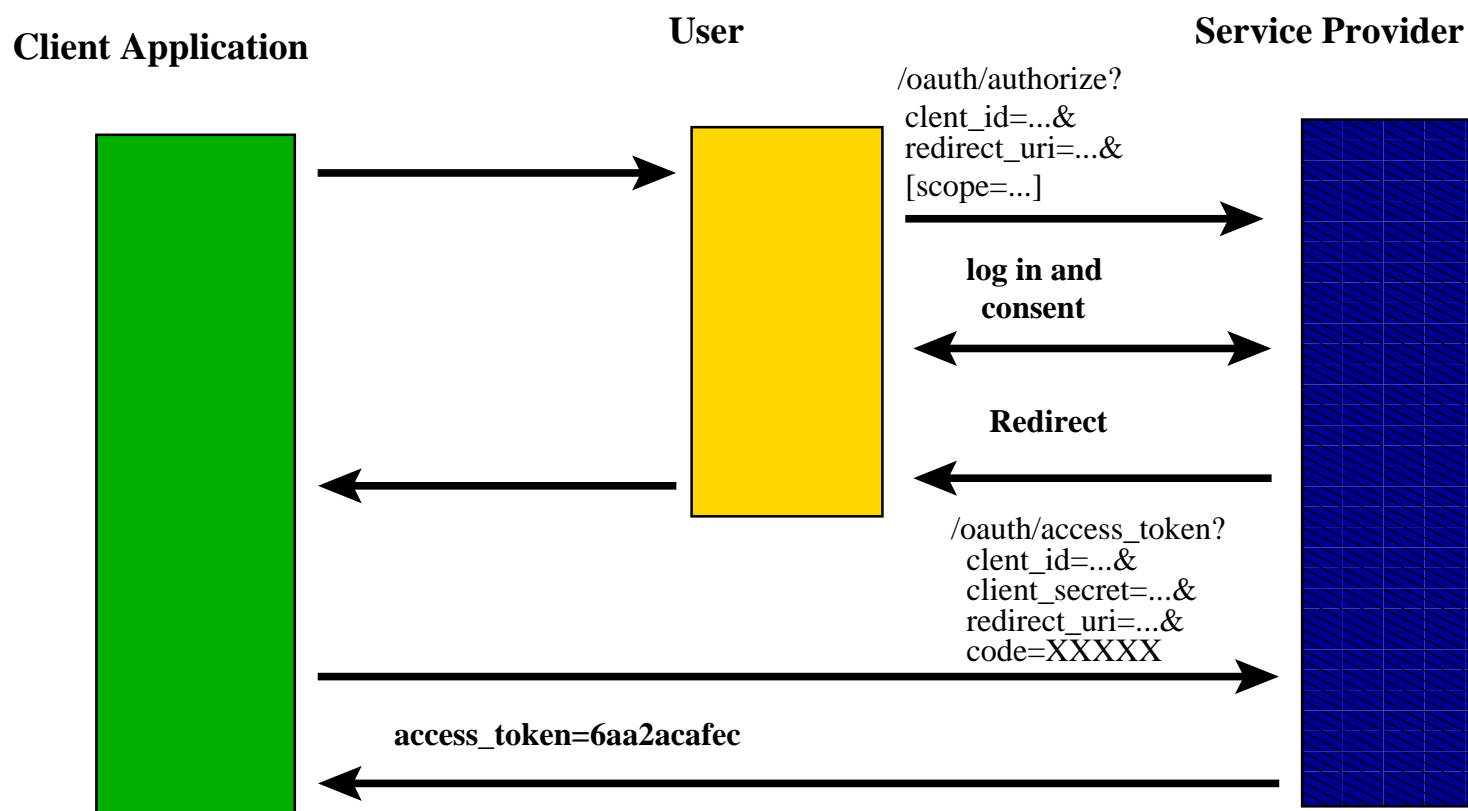


- short text-based messages: up to 140 characters
- post = tweet; post has no comments
- simpler user interface: lists, no tree-like discussions



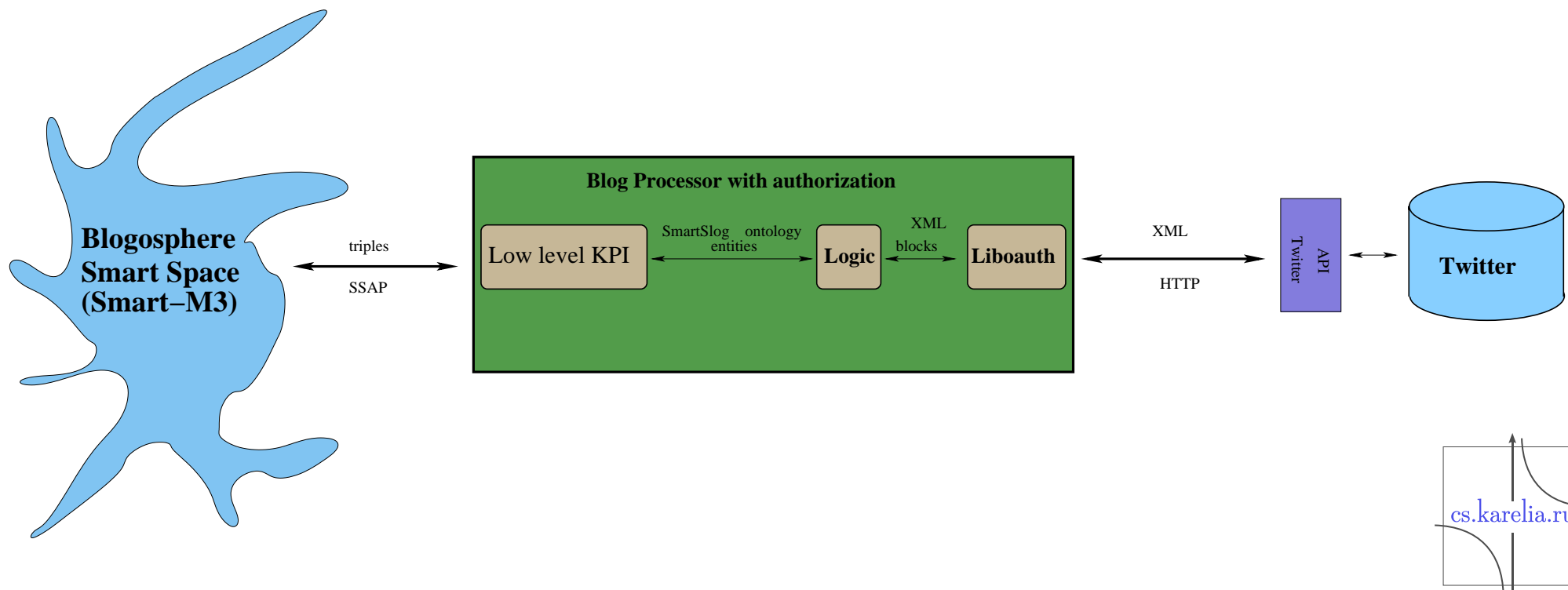
Authorization: OAuth protocol

- Application acts on behalf of the user without sharing her password
- Any HTTP POST requires read & write access



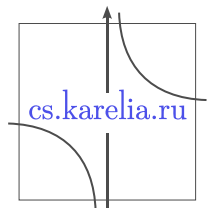
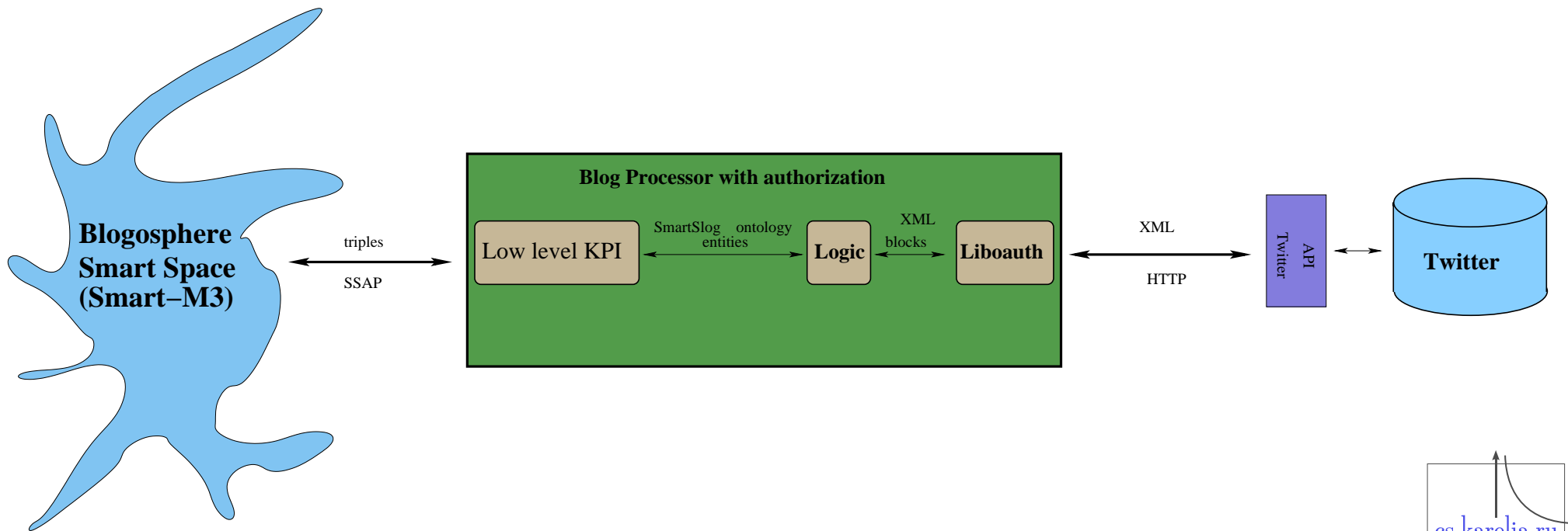
Data Flows and Transformations

- liboauth: read & write access to Twitter
- Logic: ... — KP — OWL — XML — HTTP — Twitter
- SmartSlog ontology library:
RDF store — SIB — SSAP — RDF — OWL — KP — ...



Basic Functionality

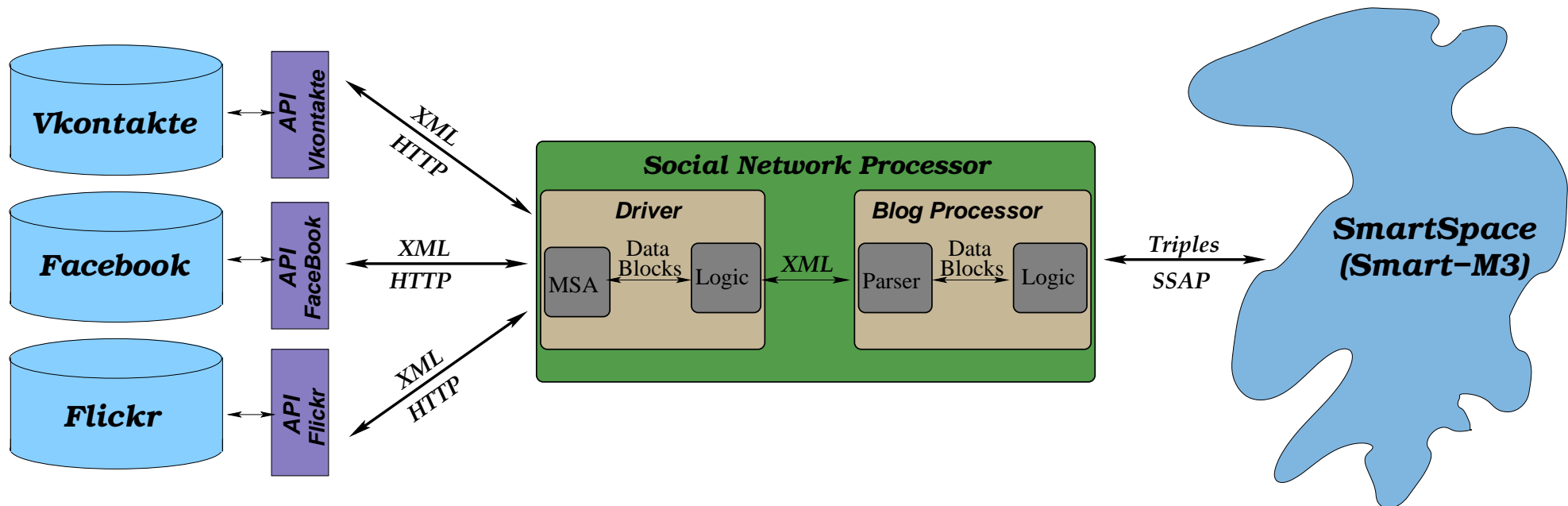
- Accounts and authorization
- User profile and friends
- Tweet read&write
- TwitterWall (who follows you)



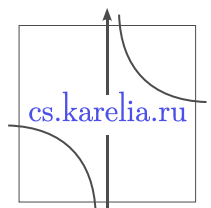
- SS-operations: SmartSlog + KPI_low (ANSI C)

Social Network Processor

- **MySocials:** libmsa accesses services of various social networks
- **Messaging** in social networks is similar to **blogging**



- 1 Social network content extends the blogosphere
- 2 The blogosphere smart space feeds social networks



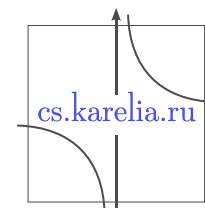
Current state: work-in-progress

- **Experimental:**
RSS Blog Processor (Python, M3-Python KPI)
- **Implementation:**
Twitter Blog Processor (C, SmartSlog)
- **Design:**
Social Network Processor (C/C++, MySocials)

Please, send your comments to
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Q&A