

Intelligent Tools for Policy Design



Deliverable 3.5

FUPOL CORE Platform Prototype Core Platform

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Document description:	<p>The objective of this document is to provide a supplement to the prototype release of the FUPOL Core Platform as of September 2013.</p> <p>The document covers the product on the requirements level, adds descriptions of the new features that were introduced since D3.4 and additional information on tests as long as selected architectural and design decisions.</p>

History

Version	Date	Reason	Prepared / Revised by
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Management Summary

The objective of the FUPOL project is the development of a new governance model to support the policy design and implementation lifecycle. The innovations are driven by the demand of citizens and political decision makers to support policy domains in urban regions with appropriate ICT technologies. Those policy domains are very important, since more than 80% of the whole population in Europe lives in urban regions and the share will further grow in the future.

Deliverable D3.5 is the prototype version of the FUPOL Core Platform as described in this document. Note that due to the nature of this deliverable almost all efforts that were necessary to produce it went into software development and that this document is only a description of what the software does and does not. So in order to benefit most from reading it we strongly suggest to use the software to get a better understanding of the features. There's a user manual available that will guide you.

The FUPOL Core Platform is a central module of the FUPOL System, providing services to the FUPOL users and to the other FUPOL modules:

- Centralized access and account management (security, user management)
- Campaign management (support for research activity) including tools like opinion maps and questionnaires
- Client management (support for multi-client operations)
- Data and knowledge management including GIS data, semantic and statistical data using semantic web technology
- Social media management including content crawling from Twitter, Facebook and other social media sites
- Operational support (services that support the reliable operations of the FUPOL System like logging, journaling)
- Integration services (messaging middleware, service coupling, ...)

An important note is that this document covers the FUPOL Core Platform, but not the complete FUPOL System. Thus all requirements mentioned in this software requirements specification, the architecture and the design focus on the core platform. Interactions with the other FUPOL modules are explained on interface level, but lack any further detail, as these have to be specified for the respective modules separately.

In order to fully understand the FUPOL Core Platform we recommend reading...

- D3.1 Software Requirements Specification to get an understanding of the system's purpose and the requirements that drive this architecture.
- D3.2 Preliminary Software Design Description to get an understanding of the technical design that realizes the requirements from D3.1
- D3.6 Revised Requirements Specification and Use Cases (which is the predecessor of D3.1)
- To a lesser extent we recommend reading D3.7 Test Reports Prototype to get an understanding of some user scenarios and workflows
- ...and finally there's our user manual that describes how to use the software product from the civic servant's point of view

This deliverable (D3.5) is based on D3.4, D3.6, D3.2 and D3.7, with parts (i.e. screenshots) taken over from the user manual, too.

There are significant dependencies between the content of D3.5 and other deliverables, like D2.1/2.4/2.6/2.19, D3.4, D3.65, D4.1/4.2/4.3/4.4, D5.1/D5.25.3, D6.1/6.2/6.3, D7.1/7.2/7.3/7.4 and D8.5 which have been respected to design the FUPOL Core Platform based on the requirements as documented in D3.1/D3.6.

While this document's predecessor (D3.4) was based on the software release from late March 2013 this document is based on release 0.33 from the end of September 2013.

1 Introduction and Goals

This is the description of the intermediate version of the FUPOL Core Platform, as being under development by the team of work package 3 (WP3), based on the project state of late March 2013.

The FUPOL Core Platform is progressing well and it now provides features of actual real-life use for the pilot cities, albeit it's not yet feature complete. The product's quality status can be described as "near production ready". Most insufficiencies are related to non-functional requirements (better usability with some features, performance improvements, ...).

This document shall describe what is available right now, what can be achieved when using the software and how it was done on a conceptual and technical level. The main focus is on what has been achieved and not on what will be in the future.

It's difficult to describe working software using text only, so we added some screenshots to this document, but we recommend using the product to get the whole user experience.

For an introduction to the project and the product under development we suggest to start with D3.6 Revised Software Requirements Specification and Use Cases. Deliverable D3.2 will provide details on the architecture that go beyond the scope of this deliverable, while D3.7 will enhance the reader's experience with test cases and exemplary workflows.

Finally there's the user manual which gives detailed instructions on how to use the software, following a very pragmatic and user-centric approach.

This deliverable's structure is based on its predecessor D3.4. In order to deliver a more concise document we stripped all 'generic' chapters from it (they're left as headers to preserve the chapter enumeration) and refer to D3.4 where necessary.

2 The Purpose of the Project

For an introduction to the project's purpose please refer to D3.1.

3 Features

This chapter describes the features that are implemented in release 0.33.

3.1 Product Scope of the Final Product

For a detailed overview of the requirements of WP3 read the software requirements specification in D3.6 Revised Software Requirements Specification and Use Cases.

The following table provides an overview of the requirements regarding the final product. Functional requirements are in general written as use cases, while non-functional requirements are declared as atomic requirements.

Note that D3.5 describes the prototype version as of September 2013 (release 0.33) and not the final product. However this list shall support you in understanding the overall product scope. For an overview of what is already available please read the following chapter (user stories).

All Requirements of the Core Platform (107 issues)			
Type	Component	Key	Summary
Use Case	Access Management	WP3-58	Log out as an internal user
Use Case	Access Management	WP3-57	Log in as an internal user
Use Case	Access Management	WP3-335	Log out as an external user
Use Case	Access Management	WP3-336	Log in as an external user
Use Case	Account Management	WP3-44	Create/edit/lock/unlock/delete system administrator account
Use Case	Account Management	WP3-42	Reset Password
Use Case	Account Management	WP3-43	Change password
Use Case	Account Management	WP3-37	Lock User Account
Use Case	Account Management	WP3-38	Unlock User Account
Use Case	Account Management	WP3-36	Create User Account
Use Case	Account Management	WP3-35	Activate account
Use Case	Account Management	WP3-40	Delete User Account
Use Case	Account Management	WP3-39	Edit User Account
Use Case	Account Management	WP3-1224	Manage Trusted Users
Use Case	Campaign Management	WP3-338	Push campaign data back to the data base
Use Case	Campaign Management	WP3-337	Pull campaign data from the data base
Use Case	Campaign Management	WP3-323	Provide georeferenced opinion
Use Case	Campaign Management	WP3-324	View georeferenced opinions
Use Case	Campaign Management	WP3-322	Publish interactive map
Use Case	Campaign Management	WP3-306	Finish campaign

Use Case	Campaign Management	WP3-303	Create campaign
Use Case	Campaign Management	WP3-304	Edit campaign
Use Case	Campaign Management	WP3-1226	Publish Questionnaire
Use Case	Campaign Management	WP3-1227	Answer Questionnaire
Use Case	Campaign Management	WP3-1228	View Questionnaire Results
Use Case	Campaign Management	WP3-1229	Delete Campaign
Use Case	Client Management	WP3-67	Edit client
Use Case	Client Management	WP3-69	Delete client
Use Case	Client Management	WP3-68	Lock all users of a client
Use Case	Client Management	WP3-66	Create client
Use Case	Data Management	WP3-77	Import statistical data
Use Case	Data Management	WP3-76	Link Geographical and Statistical Data
Use Case	Data Management	WP3-75	Import geographical data
Use Case	Data Management	WP3-339	Import semantic data
Use Case	Data Management	WP3-340	Delete data from the data base
Use Case	Data Management	WP3-341	Browse data
Use Case	Knowledge Management	WP3-345	Validate knowledge
Use Case	Knowledge Management	WP3-346	Link knowledge
Use Case	Knowledge Management	WP3-343	Browse knowledge
Use Case	Knowledge Management	WP3-342	Upload knowledge
Use Case	Knowledge Management	WP3-344	Delete knowledge
Use Case	Operational Support	WP3-45	Read system log-/trace-file
Use Case	Operational Support	WP3-347	Read user activity journal
Use Case	Social Media Management	WP3-62	Publish to social media window
Use Case	Social Media Management	WP3-53	Watch social media window on-the-fly
Use Case	Social Media Management	WP3-52	Set up a social media window
Use Case	Social Media Management	WP3-54	Stop scheduled social media window
Use Case	Social Media Management	WP3-296	Manage social media accounts
Use Case	Social Media Management	WP3-295	Schedule social media window
Use Case	Social Media Management	WP3-291	Watch scheduled social media window
Atomic Requirement	Access Management	WP3-64	User access must be possible through a web browser
Atomic Requirement	Access Management	WP3-56	The system must store passwords in an encrypted form
Atomic Requirement	Access Management	WP3-41	The system should provide a centralized security mechanism
Atomic Requirement	Data Management	WP3-65	The GIS model must follow the INSPIRE directive
Atomic Requirement	Data Management	WP3-55	The simulator API should be accessible locally (on-site at the customer) so that desktop simulation systems can be used
Atomic Requirement	Data Management	WP3-32	Data Import of Corine 2006 data (urban atlas)
Atomic	Data Management	WP3-31	LUCAS Data Import (Land use)

Requirement			
Atomic Requirement	Data Management	WP3-30	Utility function: Include database table to store weights & factors by location
Atomic Requirement	Data Management	WP3-430	The ontology for representing social media data is FOAF
Atomic Requirement	Data Management	WP3-19	Generic Data Import Interface GIS Inked with Open Government Data
Atomic Requirement	Data Management	WP3-1	The system must support common statistical database classification codes
Atomic Requirement	Data Management	WP3-3	The system must support the import of rich GIS data
Atomic Requirement	Data Management	WP3-2	The system must support data import of EUROSTAT regional / urban statistical data
Atomic Requirement	Data Management	WP3-327	Geographical data exchange must be based on well-established GIS technologies (WFS/WMS/WFS-T)
Atomic Requirement	NFR - Look & Feel	WP3-221	Subpage layout and message handling
Atomic Requirement	NFR - Look & Feel	WP3-219	Labels of mandatory fields must be bold
Atomic Requirement	NFR - Look & Feel	WP3-74	The look&feel must be controllable using a stylesheet
Atomic Requirement	NFR - Look & Feel	WP3-325	The web client must be customizable to the (city) client's corporate identity
Atomic Requirement	NFR - Maintainability & Support	WP3-281	Selenium must be used for GUI based test automation
Atomic Requirement	NFR - Maintainability & Support	WP3-232	Releases must be versioned following a triplet-style including build-numbers
Atomic Requirement	NFR - Maintainability & Support	WP3-188	JIRA must be used as the test management tool
Atomic Requirement	NFR - Maintainability & Support	WP3-81	JIRA must be used as a the defect tracking tool
Atomic Requirement	NFR - Maintainability & Support	WP3-73	Jenkins must be used as a continuous integration server
Atomic Requirement	NFR - Maintainability & Support	WP3-63	The test coverage must be measured, historized and interpreted
Atomic Requirement	NFR - Maintainability & Support	WP3-61	The test process and the test methodology must be based on ISTQB recommendations
Atomic Requirement	NFR - Maintainability & Support	WP3-60	JUnit must be used for unit/unit integration tests
Atomic Requirement	NFR - Maintainability & Support	WP3-59	Subversion must be used for source code versioning
Atomic Requirement	NFR - Maintainability & Support	WP3-50	Spring must be used for linking the software components at runtime
Atomic Requirement	NFR - Maintainability & Support	WP3-49	Maven must be used for building the core platform
Atomic Requirement	NFR - Maintainability & Support	WP3-47	The source code must comply to the Sun/Oracle code conventions for the Java language

Atomic Requirement	NFR - Maintainability & Support	WP3-48	The source tree and the binary artifacts must be structured in a way that is compatible with Maven
Atomic Requirement	NFR - Maintainability & Support	WP3-46	The core platform must be implemented using Java/J2EE
Atomic Requirement	NFR - Maintainability & Support	WP3-432	Sonar must be used as a code quality server
Atomic Requirement	NFR - Maintainability & Support	WP3-431	Wicket must be used for implementing the web based user interface
Atomic Requirement	NFR - Operational & Environmental	WP3-349	The system's architecture must support the adding/removing of modules without a complete redesign
Atomic Requirement	NFR - Operational & Environmental	WP3-326	Internal social media data exchange must be based on semantic web technology
Atomic Requirement	NFR - Performance	WP3-79	The system must scale up to the given numbers
Atomic Requirement	NFR - Performance	WP3-70	The system must be available 24x7 at 99%
Atomic Requirement	NFR - Performance	WP3-33	The system must be able to serve multiple clients at the same time
Atomic Requirement	NFR - Security	WP3-80	The eCitizen's data must be anonymized
Atomic Requirement	NFR - Usability & Humanity	WP3-348	The system must be usable for people with visual impairment
Atomic Requirement	NFR - Usability & Humanity	WP3-15	Multilingual User Interface
Atomic Requirement	Operational Support	WP3-72	log4j must be used for logging/tracing
Atomic Requirement	Operational Support	WP3-71	The system must generate trace-files in order to support technical root cause analysis by the system operator
Atomic Requirement	Social Media Management	WP3-27	Posting in multiple Facebook & LinkedIn Groups
Atomic Requirement	Social Media Management	WP3-21	Import Facebook Polling Data
Atomic Requirement	Social Media Management	WP3-20	Import Interface Polling LinkedIn
Atomic Requirement	Social Media Management	WP3-16	Evaluate SMMS (Social Media Management Systems)
Atomic Requirement	Social Media Management	WP3-13	Core functionality to open a policy issues for discussion
Atomic Requirement	Social Media Management	WP3-10	E-Mail notification of changes
Atomic Requirement	Social Media Management	WP3-11	Question: CMS ?
Atomic Requirement	Social Media Management	WP3-9	Opinion poll functionality
Atomic Requirement	Social Media Management	WP3-8	Discussion forum with threads
Atomic Requirement	Social Media Management	WP3-6	Establish Atom feed.
Atomic	Social Media Management	WP3-5	Establish RSS Feed to import news

Requirement	data		
Atomic Requirement	Social Media Management	WP3-4	FACEBOOK API
Atomic Requirement		WP3-406	FCM Matrix storage in core platform

Note that the project's development schedule is driven by user stories as the team has chosen Scrum as their project management framework.

3.2 Product Scope of the Prototype Version

As already mentioned the prototype version is not the final product and so not all of the features as listed in the previous chapter have been completed until now.

The following list shall provide an overview of what is available. Each feature is described in the form of a user story, following the pattern...

As [stakeholder] I want [feature] in order to [purpose]

These user stories are just cues that try to summarize a feature's core idea. In reality they're backed by additional information (i.e. user acceptance criteria), but it's beyond the scope of this document to provide the full content.

We recommend reading the FUPOL Core Platform's user manual (written by WP8) to understand how to use the system and to get an overview of the available features as seen by a municipality's member (see chapter 7 for the table of contents of that document).

The *key* column is the user story's key in our JIRA/Greenhopper issue tracker (the tool that we use to manage the product scope).

The *summary* column is the user story's title.

The *size* column is an indicator of the user story's "size" (which can be seen as the product of complexity and "number of features") in story points (SP).

The *sprint* column describes in which sprints the user story has been touched (usually: implemented). If the development process runs well a story will be implemented within one sprint. If it's rejected by the product owner (i.e. if it doesn't work as expected) then it is up to rework in another sprint.

Key	Summary	Size [SP]	Sprint
WP3-207	As a system administrator I want all users to log in/log out in order to restrict access to active and unlocked users	13	Sprint 2, Sprint 3

<u>WP3-172</u>	As a facilitator I want to restrict access to data/knowledge base data for user roles in order to keep control of the data and comply with data protection restrictions	13	
<u>WP3-98</u>	As a user I want to activate my account in order to be able to access the system	5	Sprint 2, Sprint 3
<u>WP3-789</u>	As a simulation vendor I want to verify a user's account in order to grant access to the simulator	13	Sprint 19
<u>WP3-785</u>	As an internal user I want the social media postings been translated to my default language on-the-fly in order to better understand them	20	
<u>WP3-418</u>	As an eCitizen I want to log out from the opinion map in order to use the map as an anonymous user	8	Sprint 12
<u>WP3-371</u>	As an eCitizen I want to authenticate using my existing Facebook/Twitter account so that I don't have to create another web account for that	5	Sprint 10, Sprint 11
<u>WP3-820</u>	As an eCitizen I want to log into the opinion map/questionnaire using my Sina Weibo account in order to provide my opinion	13	Sprint 32
<u>WP3-116</u>	As a user I want to edit my account data (i.e. name) in order to identify myself	5	Sprint 3
<u>WP3-104</u>	As a system administrator I want to see a list of all users that can be administered by myself in order to be able to track their state	5	Sprint 2
<u>WP3-103</u>	As a system administrator I want to add users in order to grant system access	5	Sprint 2
<u>WP3-102</u>	As a system administrator I want to view/edit a user's account data in order to maintain his/her data in case of support incidents	8	Sprint 4
<u>WP3-100</u>	As a system administrator I want to lock/unlock accounts in order to temporarily prevent users from accessing the system	8	Sprint 4
<u>WP3-99</u>	As a system administrator I want to reset a user's password in order to support the user in getting system access again	2	Sprint 4
<u>WP3-101</u>	As a system administrator I want to delete a user's account in order to eliminate unused accounts and keep the number of people who are granted system access low	3	Sprint 4
<u>WP3-97</u>	As a user I want to change my password in order to maintain a high level of security regarding access to my own account	5	Sprint 3
<u>WP3-864</u>	As a recruiter I want to manage a trusted user's Google account in order to identify trusted user content	13	
<u>WP3-764</u>	As a recruiter I want to manage a trusted user's social media identifications in order to be able to recognize his content	8	Sprint 18, Sprint 19
<u>WP3-697</u>	As a recruiter I want to add a trusted user in order to enable him to provide content of higher priority	5	Sprint 18
<u>WP3-695</u>	As a recruiter I want to see a list of (trusted) users in order to get an overview of them	3	Sprint 18, Sprint 19
<u>WP3-694</u>	As a recruiter I want to mark trusted users as being untrusted in order to revoke the special rights that are inherited from that role	3	Sprint 18
<u>WP3-693</u>	As a recruiter I want to mark an existing user with role "eCitizen" as trusted in order to add trusted users to the system.	8	Sprint 18

<u>WP3-692</u>	As a system administrator I want to assign the recruiter-role to users in order to enable them to register trusted users	5	Sprint 18
<u>WP3-494</u>	As an administrator I want the system to prevent me from deleting a user that is a member in a campaign in order to prevent situations where campaigns would be rendered unusable	5	Sprint 15
<u>WP3-483</u>	As an administrator I want an email link for sending the user an activation email	5	Sprint 15
<u>WP3-139</u>	As a facilitator I want to write a campaign start assignment report that covers the campaign's goals in order to keep focus	13	Sprint 9
<u>WP3-137</u>	As a facilitator I want to see a list of my campaign's data in order to get an overview	20	
<u>WP3-93</u>	As a system operator I want to edit a client's data in order to maintain it	8	Sprint 4, Sprint 5
<u>WP3-90</u>	As a system operator I want to lock all user accounts of a client in order to have a convenient way to temporarily prevent a client from accessing the system	8	Sprint 4
<u>WP3-826</u>	As a campaign member I want to see all stored content regarding to a social media window in order to get an overview over a longer timeframe	8	
<u>WP3-825</u>	As a facilitator/communicator I want to store crawled content of a social media target for Facebook groups	20	Sprint 20
<u>WP3-783</u>	As an internal user I want to see basic statistical information on a social media window	13	
<u>WP3-782</u>	As an internal user I want to directly access links that are contained in postings in order to browse to the linked content	5	
<u>WP3-941</u>	As a campaign member I want to see a list of all questionnaires that are part of a campaign in order to browse to their details	8	Sprint 25
<u>WP3-522</u>	As a user I want to see a posting's topics in the result list in order to get an overview of its content	13	Sprint 17
<u>WP3-523</u>	As a user I want the topics of each posting being analyzed as part of the social media content retrieval	40	Sprint 17
<u>WP3-495</u>	As a campaign member I want to see a list of all associated social media windows in order to access them	5	Sprint 15
<u>WP3-493</u>	As a user I want to remove a social media window from a campaign in order to stop sharing it	5	Sprint 15
<u>WP3-492</u>	As a user I want to see the campaign that a social media window is associated with in order to understand its use	1	Sprint 15
<u>WP3-490</u>	As a campaign member I want to store an interactive social media search result and add the data to the campaign	13	Sprint 15
<u>WP3-491</u>	As a campaign member I want to use one of my social media windows in a campaign in order to crawl content from it	5	Sprint 15
<u>WP3-488</u>	As a campaign member I want to see a list of all (past) crawling jobs in order to access the collected data	8	Sprint 16
<u>WP3-475</u>	As a user I want to access social media results using my browser in order to process the data using semantic web tools	13	Sprint 14
<u>WP3-471</u>	As a campaign user I want to crawl social media content as defined by the social media window's schedule in order to store it	13	Sprint 16

<u>WP3-468</u>	As a campaign member I want to save a Google social media target's crawled content in order to analyse/use it later	8	
<u>WP3-467</u>	As a campaign member I want to save a Twitter social media target's crawled content in order to analyse/use it later	8	Sprint 16
<u>WP3-469</u>	As a campaign member I want to see the crawled social media content in order to get its content	5	Sprint 16
<u>WP3-463</u>	As a campaign member I want to pause a scheduled crawling process in order to stop content retrieval	5	Sprint 16
<u>WP3-462</u>	As a facilitator I want to see a list of all activities regarding my campaign in order to understand changes	20	
<u>WP3-466</u>	As a campaign member I want to save a Facebook social media target's crawled content in order to analyse/use it later	8	Sprint 16
<u>WP3-445</u>	As a user I want to edit an existing social media window in order to change the search criteria	8	Sprint 12
<u>WP3-446</u>	As a user I want to delete my social media window in order to get rid of it	5	Sprint 12
<u>WP3-448</u>	As an eCitizen I want to distinguish my own opinions from those of the others in order to identify them quickly	3	Sprint 12
<u>WP3-443</u>	As a campaign member I want to see a preview of the public opinion maps in order to understand the settings	8	Sprint 12
<u>WP3-434</u>	As a campaign member I want to set the schedule of a social media window in order to regularly crawl content from there	13	Sprint 13
<u>WP3-435</u>	As an eCitizen I want to reply to an opinion in order to start a dialogue	13	
<u>WP3-427</u>	As a user I want to see and manage a list of all my social media windows in order to access them	13	Sprint 12
<u>WP3-426</u>	As a user I want to store a social media window's definition in order to use it later for content retrieval	8	Sprint 12
<u>WP3-405</u>	As a facilitator/communicator I want to crawl content that is linked by other content (tweets, Facebook postings, RSS, ...) in order to store and analyse it	13	
<u>WP3-404</u>	As a facilitator/communicator I want to define a social media target for RSS feeds in order to crawl content from it	13	Sprint 21, Sprint 22
<u>WP3-392</u>	As a campaign member I want to see a list of opinion maps in order to get an overview of the current campaign	8	Sprint 10
<u>WP3-385</u>	As a campaign member I want to filter the map to display opinions that have been marked as inappropriate previously in order to review and delete the opinions	8	
<u>WP3-384</u>	As a campaign member I want to delete inappropriate opinions in order to comply with the law	8	
<u>WP3-383</u>	As an eCitizen I want to mark an opinion as inappropriate (i.e. illegal) in order to signal illegal or otherwise inappropriate content to the opinion map provider	8	
<u>WP3-370</u>	As a facilitator I want to force the eCitizens to authenticate with the map if they want to provide opinions in order to prevent fraud/vandalism	5	Sprint 10
<u>WP3-369</u>	As a facilitator I want to be able to publish the resulting opinion map to the public without access restrictions in order to disseminate the result	8	Sprint 11

<u>WP3-368</u>	As a facilitator I want to decide whether if the eCitizens can see the opinions of the others during the opinion collection process in order to allow/prevent mutual influence	8	Sprint 11
<u>WP3-367</u>	As a facilitator I want to stop the spatial opinion gathering process on my own command in order to freeze the current result	8	Sprint 11
<u>WP3-364</u>	As an eCitizen I want to edit my own opinions on the map in order to correct any errors that I might have found	13	Sprint 10
<u>WP3-362</u>	As a facilitator/social media manager I want to integrate a campaign's map on my homepage in order to provide a consistent look&feel to the eCitizens	13	Sprint 9
<u>WP3-365</u>	As an eCitizen I want to delete my opinions in order to revoke them	8	Sprint 11
<u>WP3-366</u>	As a facilitator I want the map be withdrawn from the public upon my own command in order to prevent citizens from viewing it	13	Sprint 12
<u>WP3-363</u>	As a campaign member I want to take a look at the collected opinions using the map in the FUPOL console whenever I want in order to get the current situation	13	Sprint 10
<u>WP3-320</u>	As a facilitator I want to edit a campaign's data in order to update its contents	13	Sprint 9
<u>WP3-818</u>	As a facilitator I want to delete a campaign in order to remove it from the list	20	Sprint 21
<u>WP3-425</u>	As a facilitator I want to add social media targets for Facebook group search in order to retrieve content from it	13	Sprint 20
<u>WP3-208</u>	As a system operator I want to see a client's geographical bounding box upon preview/save/view of a client in order to visually validate the client's bounding box	5	Sprint 3, Sprint 4
<u>WP3-94</u>	As a system operator I want to define a client's geographical bounding box in order to limit GIS data access to the area that is covered by this box	13	Sprint 2
<u>WP3-92</u>	As a system operator I want to delete a client in order to prevent all his users from accessing the system again	5	Sprint 5
<u>WP3-308</u>	As a facilitator/decision maker/domain expert/communicator I want to see my municipality's logo on the page header in order to get a customized look	3	Sprint 18, Sprint 19
<u>WP3-307</u>	As a system operator I want to upload a client's logo in order to have it rendered on the client's pages	13	Sprint 18, Sprint 19
<u>WP3-890</u>	As a user I want to see a trusted user in the RDF data in order to get a complete overview of his content	13	
<u>WP3-878</u>	As an eCitizen I want to use the opinion maps with my browser (IE/Chrome/Safari) in order to use it without changing my security settings	13	Sprint 22
<u>WP3-880</u>	As a campaign user I want a post's geographical coordinates stored in order to visualize the location later	20	Sprint 30
<u>WP3-870</u>	As a facilitator/communicator I want to crawl comments on Facebook postings in order to understand the debate	13	
<u>WP3-865</u>	As a facilitator/communicator I want to crawl and store content from RSS feeds in order to use it as part of my campaign	13	Sprint 22
<u>WP3-866</u>	As WP6 I want to navigate to social media content following a sioc:Forum in order to visualize the	20	Sprint 21

	discussion stream		
<u>WP3-811</u>	As a campaign member I want to see a trusted user's demographic data in order to better understand the context of a posting	8	
<u>WP3-792</u>	As WP5 I want a SparQL interface for experimenting with the social media data	5	Sprint 20, Sprint 21
<u>WP3-696</u>	As a user I want to recognize the social media content from trusted users in order to handle it with a higher priority	13	Sprint 18, Sprint 19
<u>WP3-1134</u>	As an internal user I want to see the topics related to a social media window in order to get the big picture		
<u>WP3-1133</u>	As an internal user I want to switch the social media result list between post and topic view in order to start browsing from bottom-up or top-down		
<u>WP3-1135</u>	As a facilitator I want to enable hot topic sensing on existing campaigns	13	Sprint 31
<u>WP3-1132</u>	As a user I want to see posts on a map in order to get an idea of their distribution	20	Sprint 31
<u>WP3-1083</u>	As a visualization user I want to perform a full-text search over a social media window's data		Sprint 29
<u>WP3-1011</u>	As an ecitizen i must be authenticated using my facebook/twitter credentials if it's required	8	Sprint 27
<u>WP3-996</u>	As a campaign member I want to see an overview of the answers of a question in order to understand the result	13	Sprint 27
<u>WP3-980</u>	As a facilitator I want to see a preview of my question in the editor in order to understand what I'm doing.	13	Sprint 26
<u>WP3-984</u>	As a facilitator I want to set/change the comment option in order to allow comments	8	Sprint 27, Sprint 30, Sprint 31
<u>WP3-981</u>	As a facilitator I want to select the type of question (choice vs. matrix choice) in order to set the possible range of answers	8	Sprint 26
<u>WP3-951</u>	As a facilitator I want to control a user's editing capabilities in order to allow/prevent re-edits of answers	20	
<u>WP3-953</u>	As a campaign member I want to view a questionnaire in order to access its contents	8	Sprint 25
<u>WP3-952</u>	As a facilitator I want to enable/disable a questionnaire in order to revoke it from the public	5	Sprint 26
<u>WP3-950</u>	As a facilitator I want to group the questions in order to prevent long load times	20	
<u>WP3-949</u>	As an external user I want to save my answers in order to have them uploaded to the municipality	20	Sprint 27
<u>WP3-947</u>	As a campaign member I want to delete an existing question in order to stop collection answers to it	5	Sprint 26
<u>WP3-943</u>	As a facilitator I want to embed a questionnaire in a public page in order to collect answers from there	13	Sprint 25
<u>WP3-946</u>	As a campaign member I want to edit a question in order to update its content	13	Sprint 26
<u>WP3-948</u>	As a facilitator I want to edit a questionnaire in order to update its content	8	Sprint 25
<u>WP3-945</u>	As a campaign member I want to add questions to a questionnaire in order to collect answers to them	13	Sprint 26
<u>WP3-944</u>	As a facilitator I want users to authenticate on selected questionnaires before answering questions in order to prevent fraud	5	Sprint 26
<u>WP3-942</u>	As a facilitator I want to add a new questionnaire in order to collect answers later	8	Sprint 25

<u>WP3-915</u>	As a campaign member I want the topic's words being highlighted in the posting once I move over the topic link with the mouse	8	
<u>WP3-1144</u>	As an internal user I want to see Sina Weibo posts on a map in order to understand their geographical distribution	13	Sprint 32
<u>WP3-1145</u>	As an internal user I want to switch between the logical parts of a campaign in order to focus on specific aspects	13	Sprint 33
<u>WP3-1147</u>	As a campaign member I want to see a campaign's topics on the map in order to get the big picture	13	
<u>WP3-1143</u>	As a domain expert/facilitator I want to import statistical data in order to visualize it	20	Sprint 32
<u>WP3-1148</u>	As a campaign member I want to limit the content shown on the map to specific social media targets in order to focus on details of my search result	20	Sprint 33
<u>WP3-983</u>	As a facilitator I want to add/edit/delete options (answers) in order to set the possible answers to a question	13	Sprint 27
<u>WP3-995</u>	As a campaign member I want to see a summary of the questionnaire's response in order to understand its impact	8	
<u>WP3-1146</u>	As an internal user I want to view a campaign's data dictionary in order to understand what's available	20	Sprint 33
<u>WP3-922</u>	In case of an unavailable WP6 service a scheduler should handle the resend of posts	13	Sprint 23, Sprint 28, Sprint 30, Sprint 31
<u>WP3-916</u>	As a facilitator I want to select the topic model for my campaign in order to use it for labeling posts	8	Sprint 23, Sprint 24, Sprint 28
<u>WP3-920</u>	As a facilitator I want to trigger the retraining of the topic model manually in order to get better analysis results	8	Sprint 23, Sprint 28
<u>WP3-917</u>	As a campaign user I want the selected topic model to be created/copied in order to use it in my campaign	8	Sprint 23, Sprint 28
<u>WP3-919</u>	As a facilitator I want new posts be added to the campaign topic model's text corpus in order to extract topics from them	13	Sprint 23, Sprint 28
<u>WP3-918</u>	As a campaign member I want the social media content be relabeled once the topic model changes	20	Sprint 23, Sprint 28
<u>WP3-921</u>	As the facilitator I want to see when the campaign's topic model has been changed the last time	8	Sprint 28
<u>WP3-481</u>	As WP5/WP6 I want an ontology for expressing Wordpress blog posts in order to analyze/visualize them	8	Sprint 14, Sprint 15
<u>WP3-480</u>	As WP5/WP6 I want an ontology for expressing Twitter content in order to analyze/visualize it	8	Sprint 14, Sprint 15
<u>WP3-478</u>	As WP5/WP6 I want an ontology for expressing user accounts in order to analyze/visualize them in a common way	8	Sprint 14, Sprint 15
<u>WP3-479</u>	As WP5/WP6 I want an ontology for expressing Facebook posts in order to analyze/visualize them	13	Sprint 14, Sprint 15
<u>WP3-280</u>	As a system operator I want to see the current FUPOL version on the bottom of the screen in order to be aware of the client that is in production	3	Sprint 6
<u>WP3-1036</u>	As a user I want to call some agent over voice and chat in order to get support		
<u>WP3-1183</u>	As WP5 I want to access a campaign's data dictionary in order to select the data to visualize	13	Sprint 33
<u>WP3-229</u>	Preparation Sprint 5	0	Sprint 3, Sprint 4
<u>WP3-187</u>	As a system administrator I want to see a list of a user's	13	

	activities in order to trace activity and i.e. be able to detect fraudulent behaviour		
<u>WP3-186</u>	As a user I want to see a list of all my major activities (journal) in order to trace/recall my activities	20	
<u>WP3-119</u>	As the system administrator I want user activity being journalized in order to trace the user's behaviour	40	
<u>WP3-411</u>	As a user I want to see the URL of FUPOL platform as sub-domain level of my city Domain name in order the look & feel of the FUPOL platform seems as a module of my city web site	3	
<u>WP3-286</u>	As a facilitator/communicator I want to define a social media target for Facebook in order to retrieve content from it	13	Sprint 7
<u>WP3-288</u>	As a facilitator/communicator I want to add social media targets for geolocated Twitter search in order to retrieve content from it	20	
<u>WP3-289</u>	As a facilitator/communicator I want to define a social media target for Twitter search considering the tweet's sentiment in order to retrieve content from it	5	
<u>WP3-285</u>	As a facilitator/communicator I want to define a social media target for Twitter people search in order to retrieve content from them	5	
<u>WP3-284</u>	As a facilitator/communicator I want to be able to restrict a Twitter social media target to a specific language in order to limit the search results to that language	5	
<u>WP3-283</u>	As a facilitator/communicator I want to define a social media target for Twitter hashtag search in order to retrieve content from it	8	
<u>WP3-282</u>	As a facilitator/communicator I want to define a social media target for Twitter keyword search in order to crawl content from it	13	Sprint 7
<u>WP3-279</u>	As a facilitator I want to verify all social media accounts in order to get their current connection status in a convenient way	13	Sprint 6
<u>WP3-247</u>	As a system administrator I want to get a list of all Facebook/Twitter accounts including their current status in order to maintain their data	5	Sprint 5, Sprint 6
<u>WP3-244</u>	As a system administrator I want to verify a Facebook/Twitter account in order to validate its usability	8	Sprint 6
<u>WP3-246</u>	As a system administrator I want to delete a Facebook/Twitter account in order to remove it from the system	3	Sprint 6
<u>WP3-170</u>	As an eCitizen I want my opinions to be stored anonymously without the possibility to backtrace to myself in order to be free of any political repressions	5	
<u>WP3-157</u>	As a facilitator I want to start a topic analysis on the selected social media content	40	
<u>WP3-156</u>	As a facilitator I want to publish the same information on a selectable list of social media sites in order to prevent having to do this manually	20	
<u>WP3-108</u>	As a system administrator I want to add Facebook/Twitter accounts to a client in order to use them for crawling content	8	Sprint 5
<u>WP3-877</u>	As an administrator I want to use more than one social media account for the same site in order to be able to scale resources with the demand	13	

<u>WP3-867</u>	As a facilitator/communicator I want to search for content from RSS feeds in order to use it as part of my campaign	8	Sprint 22
<u>WP3-812</u>	As a facilitator/communicator I want to store crawled content of a social media target for blogspot	20	Sprint 19, Sprint 20
<u>WP3-1130</u>	As an internal user I want to add optional authentication to RSS stream targets	13	Sprint 31
<u>WP3-1131</u>	As an internal user I want to see some hints on the search syntax in order to configure the social media target for Facebook/Twitter accordingly	3	Sprint 31
<u>WP3-1079</u>	As a facilitator/communicator I want to manage a set of social media target templates in order to use them as templates when creating a new social media window		
<u>WP3-1080</u>	As a facilitator/communicator I want to add social media targets based on predefined templates in order to reuse these targets without having to enter the same information over and over again		
<u>WP3-1081</u>	As a facilitator/communicator I want to verify if a social media target template (or all of them) are still valid in order to prevent dead links		
<u>WP3-520</u>	As a system administrator I want to enter credentials (Consumer Key, Consumer Secret, Access Token Key, Access Token Secret) in order to provide OAuth for Twitter.		
<u>WP3-519</u>	As a system administrator I want to enter credentials (AppID and App Secret) in order to provide OAuth for Facebook.		
<u>WP3-465</u>	As an administrator I want to verify a Google account in order to assess its validity	8	Sprint 13, Sprint 19
<u>WP3-429</u>	As a user I want to see a summary of the crawled social media content in order to get a brief overview	40	
<u>WP3-372</u>	As a facilitator I want the search terms highlighted in the social media results list	8	Sprint 16, Sprint 19, Sprint 20
<u>WP3-300</u>	As a facilitator/communicator I want to browse to the social media content's original position with just one mouse click in order to participate in a discussion without breaking the policy on anonymizing content	13	Sprint 17
<u>WP3-297</u>	As a facilitator/communicator I want to see the social media content in the order of the discussion stream (message, reply, reply to the reply, ...) in order to understand its context	40	
<u>WP3-298</u>	As a facilitator/communicator I want to see the social media content in its temporal context (ordered by timestamp) in order to understand the temporal correlations	8	Sprint 7
<u>WP3-1149</u>	As an internal user I want to collect and save posts from Sina Weibo in order to analyze them	20	Sprint 32
<u>WP3-1142</u>	As an administrator I want to manage Sina Weibo accounts in order to use them for collecting content	20	Sprint 32
<u>WP3-1141</u>	As an internal user I want to add targets for Sina Weibo (GUI)	13	Sprint 32
<u>WP3-1189</u>	As an internal user I want to store crawled email content	13	Sprint 33
<u>WP3-793</u>	As an internal user I want to define a social media target for email in order to fetch content from there	13	Sprint 33
<u>WP3-1190</u>	As a campaign member I want to see all geographical content of a campaign	13	Sprint 33

<u>WP3-299</u>	As a facilitator/communicator I want to define a social media target for blogspot in order to retrieve postings from there	13	Sprint 19
<u>WP3-464</u>	As a system administrator I want to manage a Google account to a client in order to use it for crawling content	13	Sprint 13, Sprint 19
<u>WP3-245</u>	As a system administrator I want to edit a Facebook/Twitter account in order to update its data	5	Sprint 6
<u>WP3-302</u>	As a facilitator/communicator I want to combine several social media targets in a single social media window in order to get a fine-grained way of defining my searches	20	Sprint 13
<u>WP3-248</u>	As a system operator I want to view a client's data in order to be aware of his contents, especially the geographical bounding box	8	Sprint 5
<u>WP3-180</u>	As a decision maker I want to be informed about topics under discussion on a selectable set of social media sites daily in order to take action in time	20	
<u>WP3-178</u>	As a decision maker I want the system to tell me if an anticipated topic is valid and to which extent it is in order to select the important topics	100	
<u>WP3-176</u>	As a decision maker I want background information on the validity of a topic (i.e. gender/age/spatial distribution of the eCitizens that discussed the topic)	13	
<u>WP3-173</u>	As an eCitizen I want to be able to search the data/knowledge base for tags and keywords in order to find data that relates to my personal interests	13	
<u>WP3-177</u>	As a decision maker I want a semantic analysis of the validated topics in order to be aware of semantic connections between them	100	
<u>WP3-168</u>	As an eCitizen I want to be able to add comments to a specific location on an interactive map in order to express my interests in a spatial manner	13	Sprint 9, Sprint 10
<u>WP3-175</u>	As a facilitator I want to be able to plug in additional simulators/models for new policy domains in order to extend the system's functionality	100	
<u>WP3-166</u>	As a facilitator I want to start online polls on various social media sites in order to get opinions	40	
<u>WP3-164</u>	As a facilitator I want to gather opinions from a community of eCitizens on a selectable set of social media sites in order to get new ideas	20	
<u>WP3-163</u>	As a facilitator I want to validate ideas and opinions using an idea management system and a peer group of reviewers selected from the community of eCitizens	20	
<u>WP3-162</u>	As a facilitator I want to validate ideas and opinions using an idea management system and a peer group of reviewers selected from domain experts	40	
<u>WP3-152</u>	As a facilitator I want to draw colored polygons on the map, comment them and add them to a layer in order to mark specific regions on the map	13	
<u>WP3-154</u>	As a facilitator I want to show/hide layers of data in order to focus on specific views on the dataset	20	
<u>WP3-151</u>	As a facilitator I want to be able to open an attribute popup showing map attributes (i.e. street name) by interacting with the map in order to get better orientation	20	
<u>WP3-150</u>	As a facilitator I want to be able to add an aerial image/satellite image as a background layer in order to get a more realistic view	13	

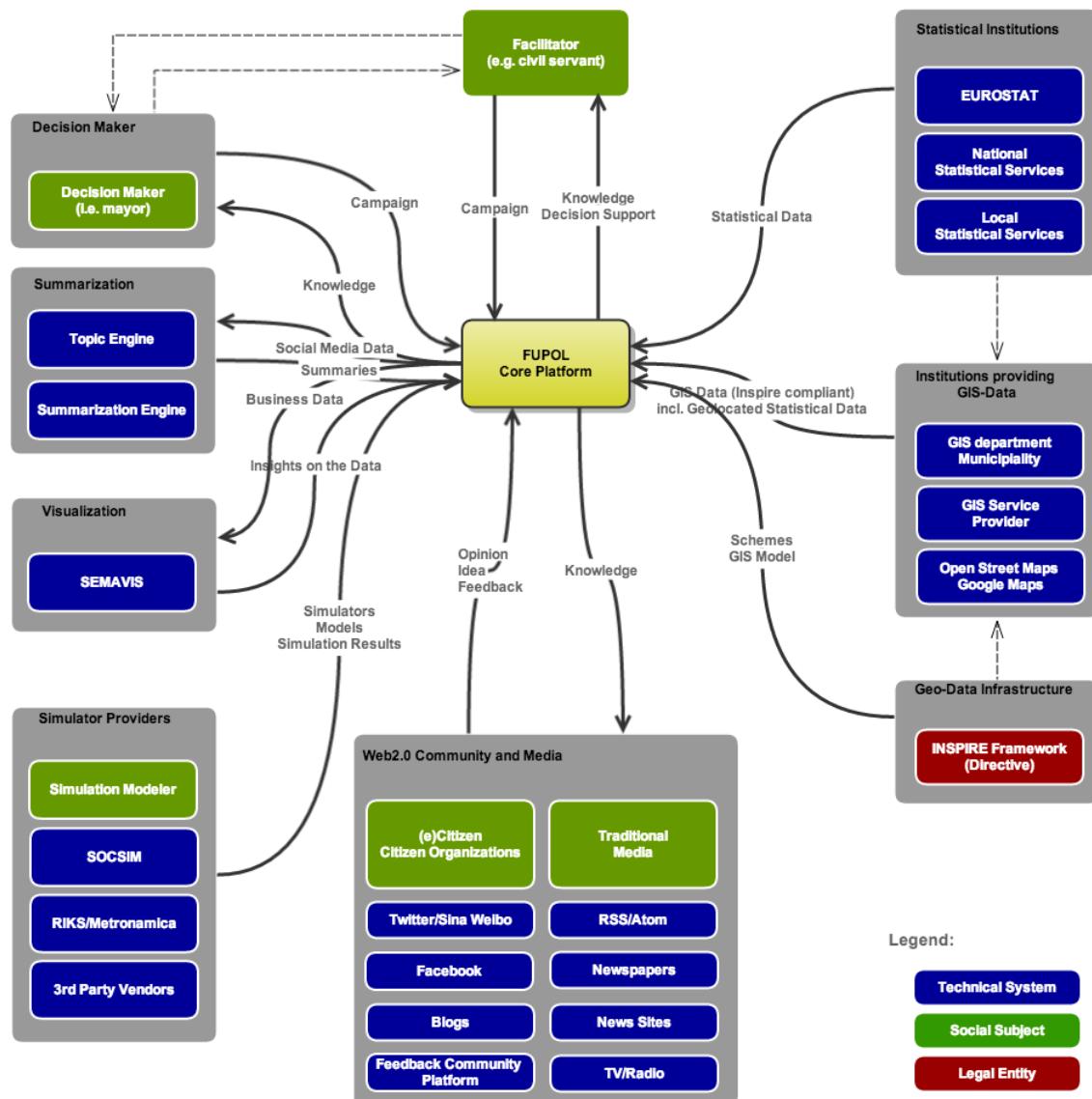
<u>WP3-155</u>	As a facilitator I want to see the spatial data on a zoomable map in order to get a 2D overview of the data's distribution	100
<u>WP3-148</u>	As a facilitator I want to see geolocated statistical data on a map in order to get the spatial relation between the data entries	20
<u>WP3-146</u>	As a facilitator I want to see geolocated statistical data on a chloropleth map in order to get the spatial relation between the data entries	100
<u>WP3-144</u>	As a facilitator I want to be able to browse through graphs of topic data in order to understand correlations and relations between topics	40
<u>WP3-141</u>	As a facilitator I want to select data that seems to be relevant for my campaign and add a copy of that data to my campaign in order to reduce the potential sources of failure	20
<u>WP3-138</u>	As a facilitator I want to write a campaign result report that covers the campaign's results in order to publish a condensed view of the campaign's outcome	8 Sprint 9
<u>WP3-143</u>	As a facilitator I want to use the tools for visualization, idea management, topicalization, social media interaction etc. independently and in any order in order to gain knowledge	100
<u>WP3-136</u>	As a facilitator I want to publish data that was generated using the tools to the knowledge base in order to reuse the data later	20
<u>WP3-133</u>	As a facilitator I want to tag data and campaigns in order to classify them, relate datasets and find them again later	20
<u>WP3-125</u>	As a facilitator I want to browse through the statistical data online in order to get details if necessary	40
<u>WP3-130</u>	As a facilitator I want to import INSPIRE data in order to use the GIS/statistical information in my campaigns	40
<u>WP3-129</u>	As a facilitator I want to import CORINE data (land use) in order to use the land use information in my simulations	40
<u>WP3-115</u>	As a facilitator I want to see the latest three steps of the campaign in the FUPOL cockpit	5
<u>WP3-132</u>	As an eCitizen I want to search for knowledge by using tags in order to get some insights regarding my interests	100
<u>WP3-110</u>	As a facilitator I want to see a list of topics that describe a crawled data set	20
<u>WP3-96</u>	As a system operator I want to administer a client's system administrators in order to enable a client to maintain his own userbase	13
<u>WP3-95</u>	As a system operator I want to add new clients to the system in order to enable them to use FUPOL	13
<u>WP3-91</u>	As a system administrator I want to see a list of all users of a client in order to be aware of his footprint	5
<u>WP3-881</u>	As a user I want to be informed of a likely social media connection rate overuse in order to have my system administrator add additional resources	20
<u>WP3-794</u>	As a system administrator I want to set up an email account in order to fetch social media content from there	13
<u>WP3-766</u>	As a recruiter I want to check the social media account of a trusted user	5 Sprint 18, Sprint 19

<u>WP3-486</u>	As a facilitator I would like to maintain a list of social media in order to establish effective two way communication		
<u>WP3-485</u>	As an administrator I would like to check postings received against a database of trusted users to legitimize decisions	40	
<u>WP3-319</u>	As a user I want to see a campaign's details in order to get an overview	8	Sprint 9
<u>WP3-317</u>	As a user I want to get a list of all campaigns that I'm participating in in order to get an overview of my research activities	8	Sprint 9
<u>WP3-316</u>	As a user I want to have shortcuts to my latest campaigns in order to open them quickly	5	
<u>WP3-301</u>	As a facilitator/communicator I want to search for social media content by means of a social media window and have the system use the defined social media accounts in a clever way in order to utilize the defined resources in an efficient way	13	Sprint 7
<u>WP3-179</u>	As a campaign member I want to see a heatmap of the posts in order to get the big picture in case of masses of posts	20	Sprint 32
<u>WP3-321</u>	As a facilitator I want to publish a selectable region of a map as part of a campaign in order to collect georeferenced opinions	20	Sprint 9

3.3 Business Context

For a complete description of the FUPOL core platform's business context, including a representative business event list, read D3.6.

The following diagram illustrates the business context of the FUPOL core platform. Note that this is not the context diagram of the FUPOL system, but just the part of it covering the important aspects of the FUPOL Core Platform.



The Business Context shows other systems and units which are connected to the FUPOL core platform. In the following the interaction between the FUPOL-system and the surrounding systems is described.

External System	Connection to FUPOL
Decision Maker	The decision maker is one of the most important stakeholders. He is the one that is responsible for the policy and uses FUPOL to integrate the eCitizen into the policy making process.
Facilitator	The facilitator uses FUPOL for every-day-business. He accesses the FUPOL core platform with a web-client and executes campaigns initiated by the decision maker. Facilitators are power-users.
Statistical Institutions	Statistical institutions are collecting and processing statistical data (i.e. population per region). Examples are eurostat and the municipality's local agencies. They provide their data in SDMX format or – more recently – although in RDF
Institutions providing GIS data	GIS-Data-Providers deliver spatial data (i.e. maps, thematic map layers, ...). This data will be used for visualization, simulation and for georeferencing statistical data.
Geo-Data Infrastructure	INSPIRE delivers a framework, structure and schemes for GIS-Data collection and processing. While not being a physical system we added it to the diagram to illustrate the influences of this standard on the GIS data and on the FUPOL core platform's architecture.
Web 2.0 Community and Media	<p>The web 2.0/3.0 community of eCitizens and citizen organizations is a group of (possibly organized) citizens that will be integrated into the policy making process either by active eParticipation (the eCitizen provides opinions upon request by the policy maker) or by passive eParticipation (the eCitizen provides opinions without an explicit trigger from the policy maker).</p> <p>Additional input for hot topic sensing is available from traditional media (newspapers, TV, radio, ...).</p> <p>The community of eCitizens uses various social media sites for expressing their opinions (i.e. Facebook, Twitter, Blogs, ...). Furthermore there's the feedback community platform (FCP, part of the FUPOL system, WP6) that is used by the reviewers for assessing ideas.</p> <p>Using Web2.0-technology and its tools e-citizens have the possibility to</p>

	take part in governmental processes; for example they can participate in online-polls. If available e-citizens can also use city-websites to leave messages, as well as they can leave their opinion in blogs. Social Media in this context can also be used for idea management.
Simulator Provider	A simulator provider offers a toolset for simulation purposes. This includes the simulation software and the simulation models. Some of them will be developed as part of the FUPOL project (WP2/WP4) while others will be off-the-shelf software from 3rd parties. Note that building those models and configuring them for a municipality's specific situation is a very complex task that is performed by the simulation modeler, a role that is usually staffed with an external consultant.
Visualization	Visualization tools are used by the facilitator and by the domain expert to get insights on FUPOL's data. FUPOL will use SEMAVIS, developed by Fraunhofer IGD (WP5). Visualization is an important tool for understanding trends and correlations in all kinds of data (semantic data, statistical data, geo data, ...)
Summarization	Summarization tools (topic analysis, summary extraction) use sophisticated algorithms to extract various aspects from the (social) media data that the FUPOL core platform collects from social media sites and the web 2.0/3.0 community.

WP3 acts as a middleware, connecting the modules from WP2/WP4, WP5 and WP6 to form a common service to the user.

3.4 The Hands-On Users of the Product

For a description of the hands-on users of the product please read D3.4.

New roles “trusted user” and “recruiter”

In addition to the roles defined in D3.1/D3.4 we've defined two more roles:

Some scenarios require to break anonymity (on a voluntary basis of course) intentionally and make eCitizens “trusted users”. For example cities might give privileges to trusted users like guaranteed feedback to all complaints etc.

Trusted users give up their anonymity (name, gender, date of birth) and their social media account information so that the FUPOL system can mark their content in a special way.

Recruiters are those persons that register trusted users in the field.

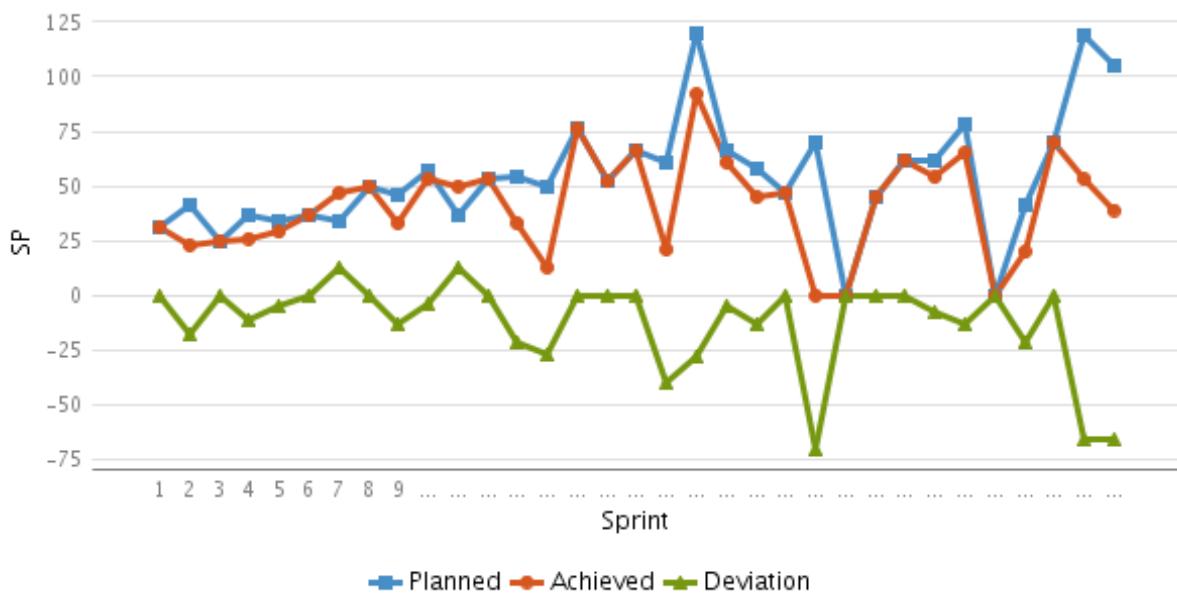
3.5 Development Team

The WP3 core development team is formed of the following people. All members (except for Nicos Evmides) are working on-site in the FUPOL Project Office in Vienna at cellent:

Team Member	Role	Relevant Skills	FUPOL Participant
Nicos Evmides	Team Member	<ul style="list-style-type: none"> • Test automation • Developer 	<ul style="list-style-type: none"> • Interfusion • (working remotely from Cyprus)
Anton Jessner	Team Member	<ul style="list-style-type: none"> • Developer • Scrum master *) 	• Qualysoft
Ilja Höngschnabel	Team Member	<ul style="list-style-type: none"> • Developer • GIS Expert 	• Cellent
Hakan Kagitcioglu	Team Member	<ul style="list-style-type: none"> • Developer • GIS expert • Test automation • Manual testing 	• Cellent
Alexander Kamenicky	Team Member	<ul style="list-style-type: none"> • Test manager • Tester • Requirements engineer 	• Qualysoft
Peter Mairhofer	Team Member	<ul style="list-style-type: none"> • Designer • Developer 	• Active Solution
Bernhard Ortner	Team Member	<ul style="list-style-type: none"> • Semantic Web Developer 	• Cellent
Nikolaus Rumm	WP Manager	<ul style="list-style-type: none"> • Architect • Requirements engineer 	• Cellent
Robert Thaler	Team Member	<ul style="list-style-type: none"> • Developer 	• Cellent

*) Note that having the Scrum Master as part of the team is an anti-pattern but for budget constraints we had to do it this way. Until now this works without imposing major problems.

The team's velocity is as follows:



- The blue line is the team's commitment (what they wanted to deliver within the next two weeks)
- The red line is what they finally delivered.
- The green line is the difference between commitment and delivery. A positive value means that they delivered more and a negative value means they were overcommitted.

Note that there's a "productivity cycle" of length 5-6, so the size of the team's deliveries oscillates. The likely cause for that is described in D3.7.

4 Architecture and Design

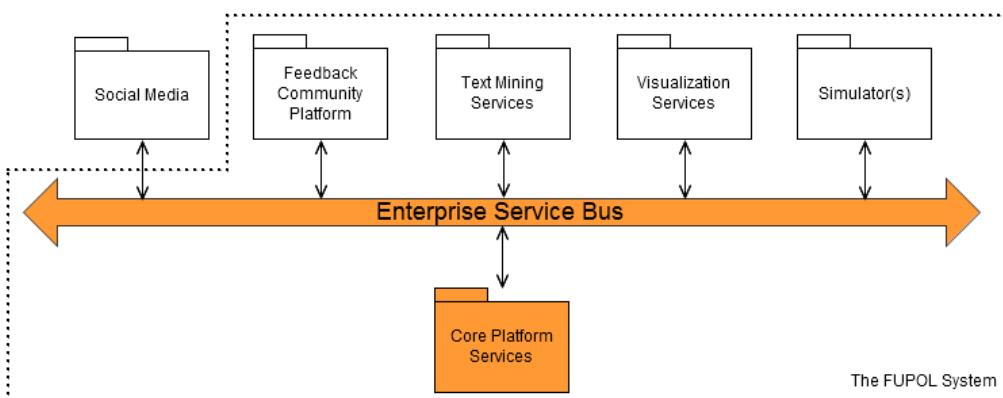
For an introduction to the architecture we recommend reading D3.5 (chapter 4).

A more detailed description can be found in D3.2.

4.1 Architectural Overview

The actual architecture is based on an enterprise service bus (ESB). Note that most connections between the modules will be (logically) point-to-point, but technically all communication will be done through the ESB.

FUPOL Architecture, Level 1

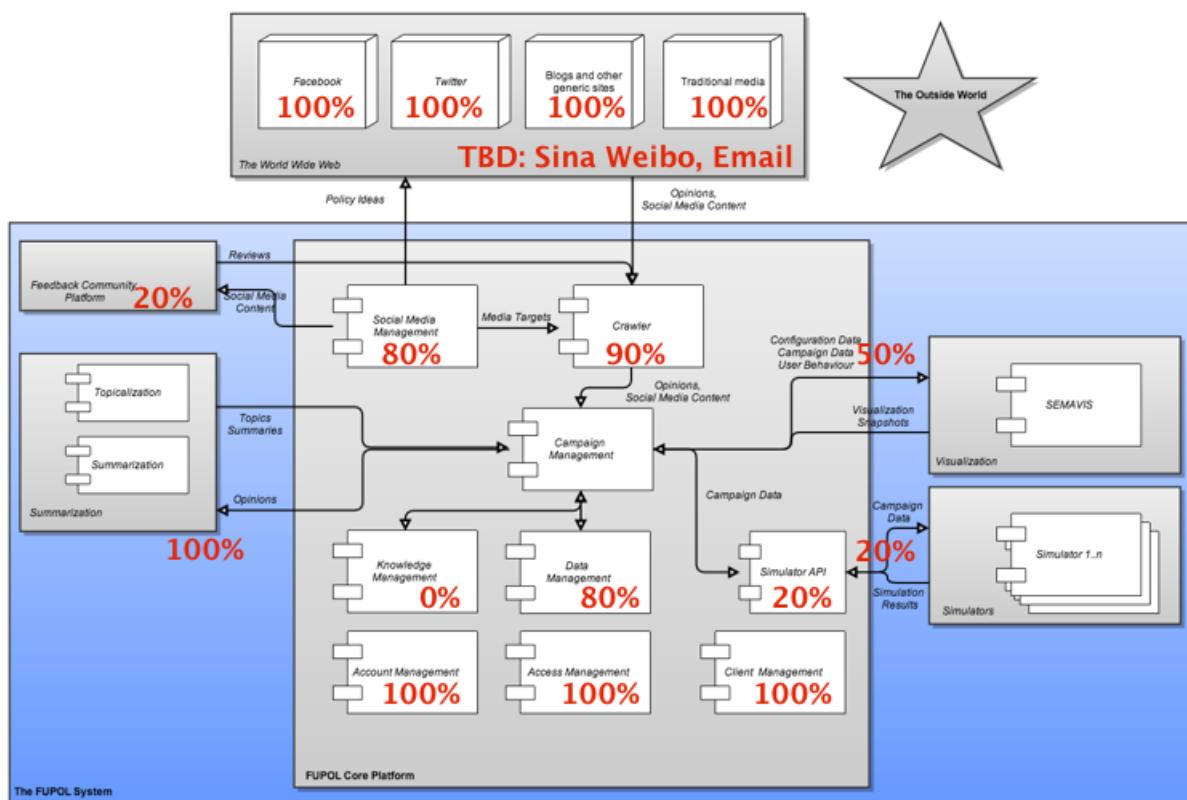


A description of the modules can be found in D3.2.

4.2 Components and Level of Completion

The following diagram provides a bird's eye view on the logical components and the main data flows in the FUPOL system. Please note that this view doesn't represent the chosen architecture but it's here for understanding the relation/interaction between the various FUPOL modules and the data flows between them. The actual design doesn't use point-to-point-connections but instead of that it's based on a SOA architecture using an enterprise service bus.

The numbers indicate an estimation of the feature completeness of these modules (numbers on the interfaces represent the level of the current technical integration) based on release 0.33 from September 2013.



As illustrated in the diagram the main focus of the FUPOL Core Platform until now was in providing:

- Basic infrastructural services (data storage, account management, access management)
- Connecting with social media and content crawling
- Campaign management and tools
- Providing infrastructure to support the development of the other modules (developed by WP2/4/5/6), i.e. the SparQL endpoint, server infrastructure, ...

Social media connectivity is now nearly feature complete. Content from the following sites can be crawled:

- Facebook (public posts)
- Facebook groups (wall board including comments)
- Twitter advanced search
- Blogspot.com
- RSS/Atom (including http basic authentication)

The following media is still not integrated:

- Sina Weibo is implemented, but not yet integrated, as we didn't get access to their API yet
- Mail (POP3) is not yet integrated

The following chapters show some screenshots of D3.5.

4.2.1 Client Management

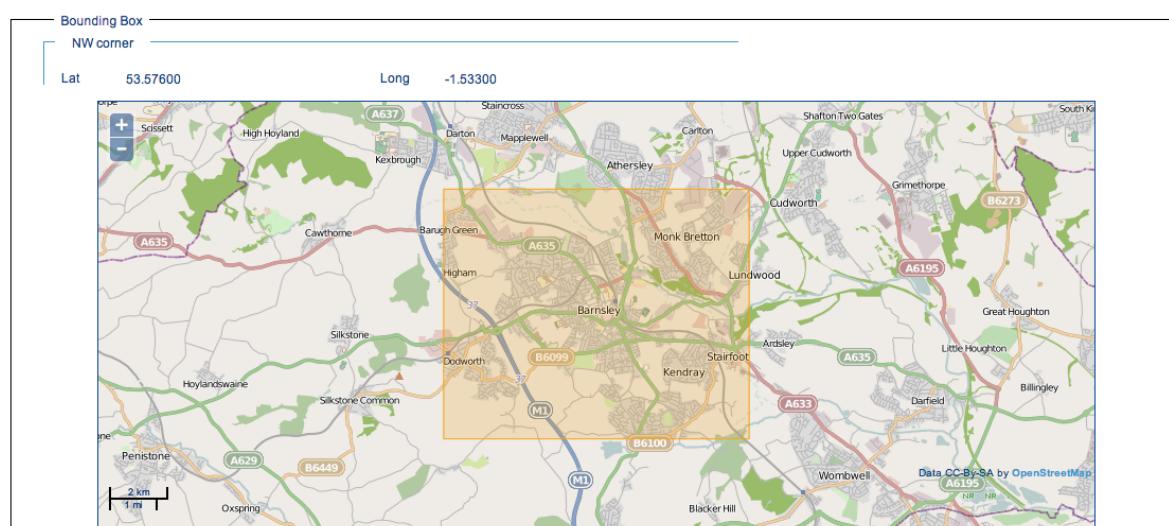
Client management is about managing pilot cities (each pilot city is a client). This task is performed by system operators and not up to the city. Therefore we developed the FUPOL System Operator Console, a web application that is only to be used internally.

The following screenshot shows a pilot city's detail page including its geographical bounding box:

View Client

Name	Barnsley
Language	English
Opinion maps	Use Open Streetmap
<input checked="" type="checkbox"/> Enable Hot Topic Sensing	

Only name, default language and Enable Hot Topic Sensing can be changed.



What's new is ...

- the function to enable/disable hot topic sensing per client
- setting the base map source per client (Google Maps or Open Street Maps)

4.2.2 Account Management

Account management is about managing user accounts. It covers i.e. creating users, resetting passwords, locking users, ...

This task is performed by the system administrator.

The following screenshot shows the user list that the system administrator uses to get an overview of the pilot city's users:

Show user list

						all users	trusted users only
Activated	Locking state	Username	First name	Last name	eMail	Actions	
✓	🔓	agrimshaw	Adam	Grimshaw	adam.grimshaw2@sheffieldfutures.org.uk	edit	
✓	🔓	barnsleyadmin	Administrator	Barnsley	admin.barnsley@fupol.eu	edit	
✓	🔓	anncremin	Ann	Cremin	anncremin@barnsley.gov.uk	edit	
✓	🔓	bwessels	Bridgette	Wessels	b.wessels@sheffield.ac.uk	edit	
✓	🔓	dfullen	Dave	Fullen	davefullen@berneslaihomes.co.uk	edit	
✓	🔓	davidgraham2	David	Graham	davidgraham2@barnsley.gov.uk	edit	
✗	🔓	eogrady	Emma	O'Grady	emmaogrady@barnsley.gov.uk	edit	
✓	🔓	eparkes	Emma	Parkes	emmaparkes1@nhs.net	edit	
✓	🔓	ecoveney	Emma	Coveney	emmacoveney@barnsley.gov.uk	edit	
✗	🔓	garysimpson	Gary	Simpson	garysimpson@barnsley.gov.uk	edit	

1 2 3 >>>
[Add user](#)

What's new is the functionality for trusted users, which is more or less a tagging mechanism for some users, so that we can identify their content. This was requested by UN Habitat, as they're very interested in the demographic details of the result's authors (i.e. is it more the male or female slum dwellers who post to a specific topic).

The next screenshot shows a user's detail page (note the personal data section for the trusted user's social media accounts):

View User

Username	nrumm
First name	Nikolaus
Last name	Rumm
eMail	nikolaus.rumm@cellent.at
Activated	✓ 2012-11-26 13:48:31
Locking state	
Roles	<ul style="list-style-type: none">● Communicator● Decision Maker● Simulation Modeler● Facilitator

Personal data

Gender	male
Date of birth	1971-11-07
Identification	
Identities	 id nikolaus.rumm  check  id nikolaus_rumm  check

For facebook the id is a number, you can find it e.g. via <http://findmyfacebookid.com/> and for twitter the id is the twitter user_name.

[Lock user](#) [Reset password](#) [Delete user](#)

[Edit](#)

[Back](#)

4.2.3 Campaign Management

Campaign managing is about creating, working with and closing campaigns. Campaigns can be seen as “policy making projects”.

The following screenshot shows a pilot city's campaigns...

View User

Username	nrumm
First name	Nikolaus
Last name	Rumm
eMail	nikolaus.rumm@cellent.at
Activated	<input checked="" type="checkbox"/> 2012-11-26 13:48:31
Locking state	
Roles	<input type="radio"/> Communicator <input type="radio"/> Decision Maker <input type="radio"/> Simulation Modeler <input type="radio"/> Facilitator

Personal data

Gender	male
Date of birth	1971-11-07
Identification	
Identities	id nikolaus.rumm id nikolaus_rumm
For facebook the id is a number, you can find it e.g. via http://findmyfacebookid.com/ and for twitter the id is the twitter user_name.	

[Lock user](#) [Reset password](#) [Delete user](#)

[Edit](#) [Back](#)

...and a campaign's detail page. Note that we've split the campaign's detail page into four sections:

- Summary (contains the campaign's name, description, team, ...) and the controls to close and to delete it
- Tools (questionnaires and opinion maps)
- Social media (social media windows and topic engines)
- Data dictionary (lists the campaign's data sets)

View Campaign: Improvement of the social infrastructure

[Summary](#) [Tools](#) [Social Media](#) [Data Dictionary](#)

Title	Improvement of the social infrastructure
Description	The City of Zagreb ensures the necessary infrastructure for the education of preschool (kindergartens) and school (schools) children and for their everyday involvement in sports activities and access to the City's cultural facilities. For the purpose of defining the new policy of improvement of the social infrastructure, the City of Zagreb opens a dialogue with the public.
Start date	2013-04-02
End date	2014-05-31
Facilitator	Silvana Tomic Rotim
Initiator	Elizabeta Knorr
Team members	<ul style="list-style-type: none"> • Milan Bandic • Natasa Kucekovic • Peter Sonntagbauer • Koraljka Eterović • Renata Vragović • Narcisa Vrdoljak • Ante Aralica • Elizabeta Knorr
Goals	<ul style="list-style-type: none"> • To get opinions from at least 200 citizens • To get at least 50 opinions regarding kindergartens • To get at least 50 opinions regarding schools • To get at least 50 opinions regarding sports facilities • To get at least 50 opinions regarding Center for autism • To get at least 5 trusted users regarding Center for autism • To have at least 10 trusted users regarding improvement of social infrastructure

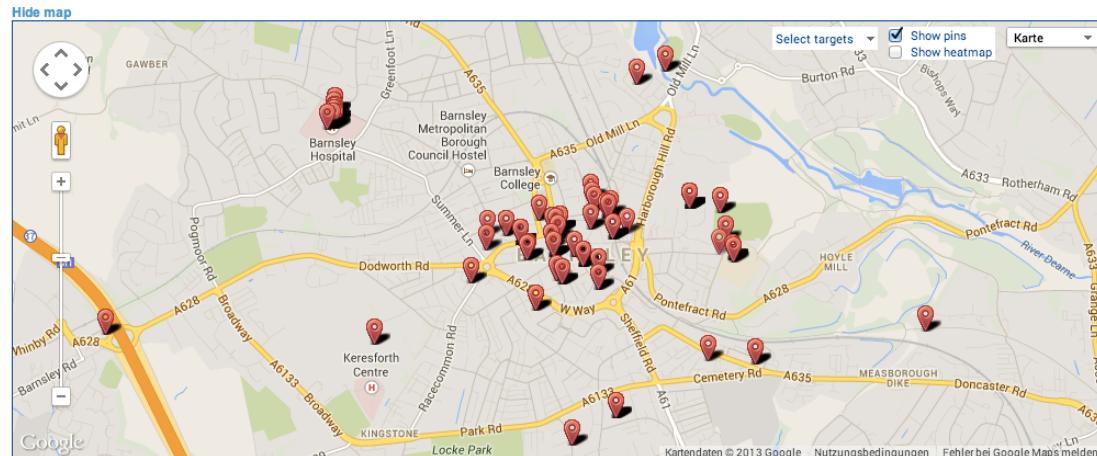
[Show map](#)

[Close campaign](#) [Delete campaign](#)

[Edit](#)

The summary tab now contains a function to show a geovisualization of the campaign's social media data (link "Show map"). This map shows all geo-located data from all social media windows that are attached to the campaign and includes a heatmap view:

Start date	2013-06-18
End date	2013-12-31
Facilitator	Peter Sonntagbauer
Initiator	Jonathan Gay
Team members	<ul style="list-style-type: none"> • Gary Simpson • Jonathan Gay • Shaun Topham
Goals	<ul style="list-style-type: none"> • All localizable tweets originating from within Barnsley are collected • All Facebook public posts with the keyword Barnsley are collected



4.2.4 Opinion Maps

The opinion map's detail page (parts of it). Note that there are several ways to tweak its public appearance (visibility settings) and modes of interaction:

Visibility

<input checked="" type="checkbox"/> all	<input type="checkbox"/> my	<input type="checkbox"/> none
---	-----------------------------	-------------------------------

Users can see all opinions, only their own opinions or no opinions at all.

Availability

<input checked="" type="checkbox"/> online	<input type="checkbox"/> offline
--	----------------------------------

Online maps are visible to all users, while offline maps are invisible.

User	Read all opinions	Read my opinions	Add/Edit/delete my opinion
Anonymous	✓	✓	✗
Logged in user	✓	✓	✓

Representations

Editable

Integrate the editable map into your CMS, blog or other web page. People can express their opinions on the editable map by setting pins at the appropriate position.

<https://fupol-6.cellent.at/fupol-client/editableOpinions/211002>



[Generate eMail...](#)

[Code Example](#)

Read Only

Integrate the read-only map into your CMS, blog or other web page or send it by email. The read-only map shows the current state of the opinion collection process and can't be edited.

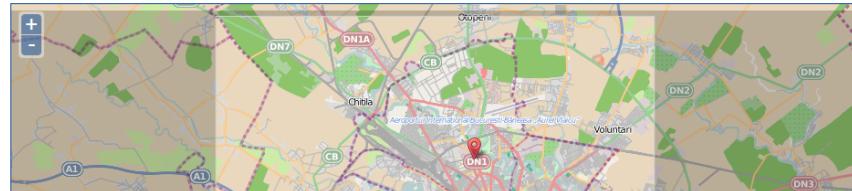
<https://fupol-6.cellent.at/fupol-client/readOnlyOpinions/211002>



[Generate eMail...](#)

[Code Example](#)

Content (Read only)



This is what it looks like when an opinion map is integrated into a blog (as an iframe with external content). In this case it's our Mtwapa pilot's blog (UN Habitat). Note that the eCitizen can use his existing Facebook or Twitter account to log in and place pins on the map (OAuth):



Please log in with
[Facebook](#) [Twitter](#) [用微博登录](#)

View the opinions by clicking on the markers.

My opinions  Other people's opinions 

Exchange Ideas

Get Informed

Monitor Activities

Vote

Search

- Home
- About
- Objectives
- Expected results in Mtwapa
- Training
- Questionnaire
- Rules
- Contact us
- News
- Editorial Letters

4.2.5 Questionnaires

A new feature is the support for questionnaires. Questionnaires are an important tool for structured collection of opinions. While not being very innovative by itself FUPOL's implementation allows the municipalities to integrate the same questionnaire on more than one web page at the same time (for example on the transport authority's web page and on the mayor's blog).

This not only adds potentially more feedback, but it allows analysis of differences in public opinion depending on the site's target audience.

The following screenshot shows the question editor:

Would you prefer a traditional european (christ child) or a more international (Santa Claus) kind of christmas decoration ?

This text will be shown as the question itself.

Purpose (internal) Given the changes in our city's society we are interested if people really prefer the old decoration that we use since decades over something that better reflects what the media is using when illustrating christmas.

The description is for internal use only. Add additional information describing the rationale behind the question etc. if you like.

Additional text We're aware that many people like our traditional christmas decoration, but we've although received requests for a more contemporary style. Please tell us what you think about it.

The additional text is for additional information for a better understanding of the question.

Selectable answers

Single Choice **Multiple Choice** Yes/No (2) Yes/Maybe/No (3) Agreement (5) Satisfaction (5) Rating (3) Rating (5)

Multiple choice: the citizen must select between [1, 2]

- Christmas decoration without a picture of the christ child is unacceptable
- Reindeers should be used whenever possible
- Santa Claus is the way to go
- I prefer to avoid religious symbols

[+ Add new answer](#)

Allow the user to explicitly deny answering the question

Add comment I have other ideas (please describe them here)

If selected renders a comment field with the given label

..and this is how the question looks in preview mode (which comes close to the way that the citizen will see the question):

1. Would you prefer a traditional european (christ child) or a more international (Santa Claus) kind of christmas decoration ?

We're aware that many people like our traditional christmas decoration, but we've although received requests for a more contemporary style. Please tell us what you think about it.

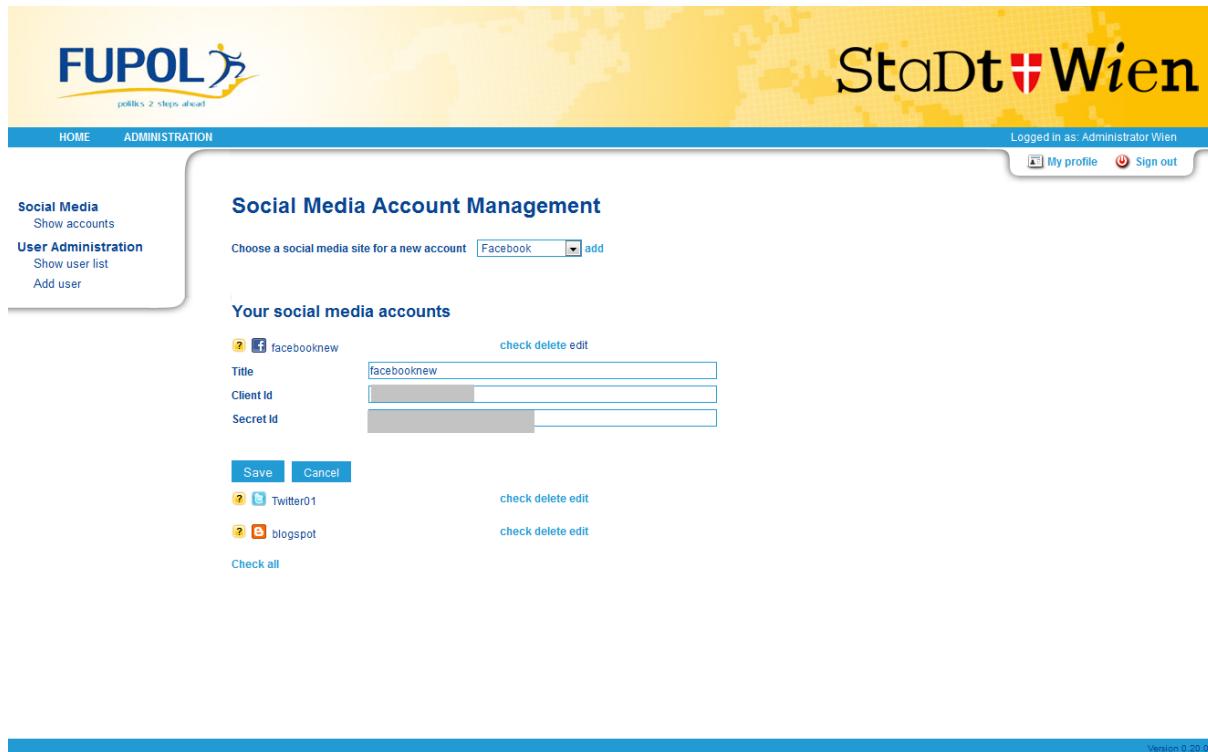
Select between 1 and 2 items from the following list.

- Christmas decoration without a picture of the christ child is unacceptable
- Reindeers should be used whenever possible
- Santa Claus is the way to go
- I prefer to avoid religious symbols
- I don't want to answer this question.

I have other ideas (please describe them here)

4.2.6 Social Media Account Management

Managing social media accounts is an important task that is to be performed by the pilot city's administrator. Note that each pilot city is managing their own accounts:



The screenshot shows the FUPOL administration interface. At the top, there are navigation links for HOME and ADMINISTRATION, and a user status message "Logged in as: Administrator Wien". On the left, a sidebar menu includes "Social Media" (with "Show accounts" option), "User Administration" (with "Show user list" and "Add user" options), and other links. The main content area is titled "Social Media Account Management" and displays a form to "Choose a social media site for a new account" with a dropdown menu set to "Facebook" and an "add" button. Below this, a section titled "Your social media accounts" lists three entries: "facebooknew" (with fields for Title, Client Id, and Secret Id, and buttons for check, delete, and edit), "Twitter01" (with buttons for check, delete, and edit), and "blogspot" (with buttons for check, delete, and edit). There is also a "Check all" link. At the bottom of the page, there is a "Save" button and a "Cancel" button.

Regarding RSS feeds there's of course no social media account management involved, but in case of authenticated RSS streams (where the user must provide username/password for authentication) the user's credentials are added directly to the social media target.

4.2.7 Social Media Content Crawling

Social media content crawling is done using social media windows (composite searches), themselves composed by social media targets (single searches).

The following screenshot shows how a campaign member (i.e. the facilitator) creates a new social media target for Facebook group search:



The screenshot displays the FUPOL platform's social media window interface. At the top, the FUPOL logo and slogan are visible, along with the "Stadt Wien" watermark. The navigation bar includes links for HOME, CAMPAIGNS, and SOCIAL MEDIA. A user is logged in as "Nikolaus Rumm". On the left, a sidebar titled "Social Media" offers options like "Add social media window" and a dropdown menu set to "Choose one". The main content area is titled "Social Media Window" and contains a sub-section "Add social media target". It features a search bar with the input "Facebook Group milan.bandic.hratska", a "retrieve" button, and a "cancel" link. Below this is a note about Facebook Group examples. To the right, there are buttons for "Save social media window", "Start search", and "Collected social media data". A "Social Media Target List" section includes a "Add new target" button and a "Save targets" button. A note at the bottom of this list says: "Move the mouse over the social media target icon to get more info." At the very bottom of the page, a small "Version 0.20.0" is mentioned.

Social media content – as crawled using the defined social media targets – is listed in reverse historical order (latest content first). The site's icon links to the content's origin (1). Search keywords can be highlighted (2).

In case that the post was written by a trusted user a “hand of trust” icon marks the trusted user’s content.

Search results

		
 2013-02-25 02:46:59	pada kaya orang tolol di kelas IX g =D bego autist semua	2 no topics available
 2013-02-25 01:06:23	je decen du singe je compte pas y remonter!	1 no topics available
 2013-02-24 05:38:20	A self-named 'artist' tonight told me the future was autistic , and highly empathic.	no topics available
 2013-02-24 02:13:02	When we browse on Google autism, they only talk about autist childs, everybody can become autist at any ages !!! And there is different levels of autism, if you talk or answer very rarely to the people you can be sure to be an autist. A lot people are without even to know.	no topics available

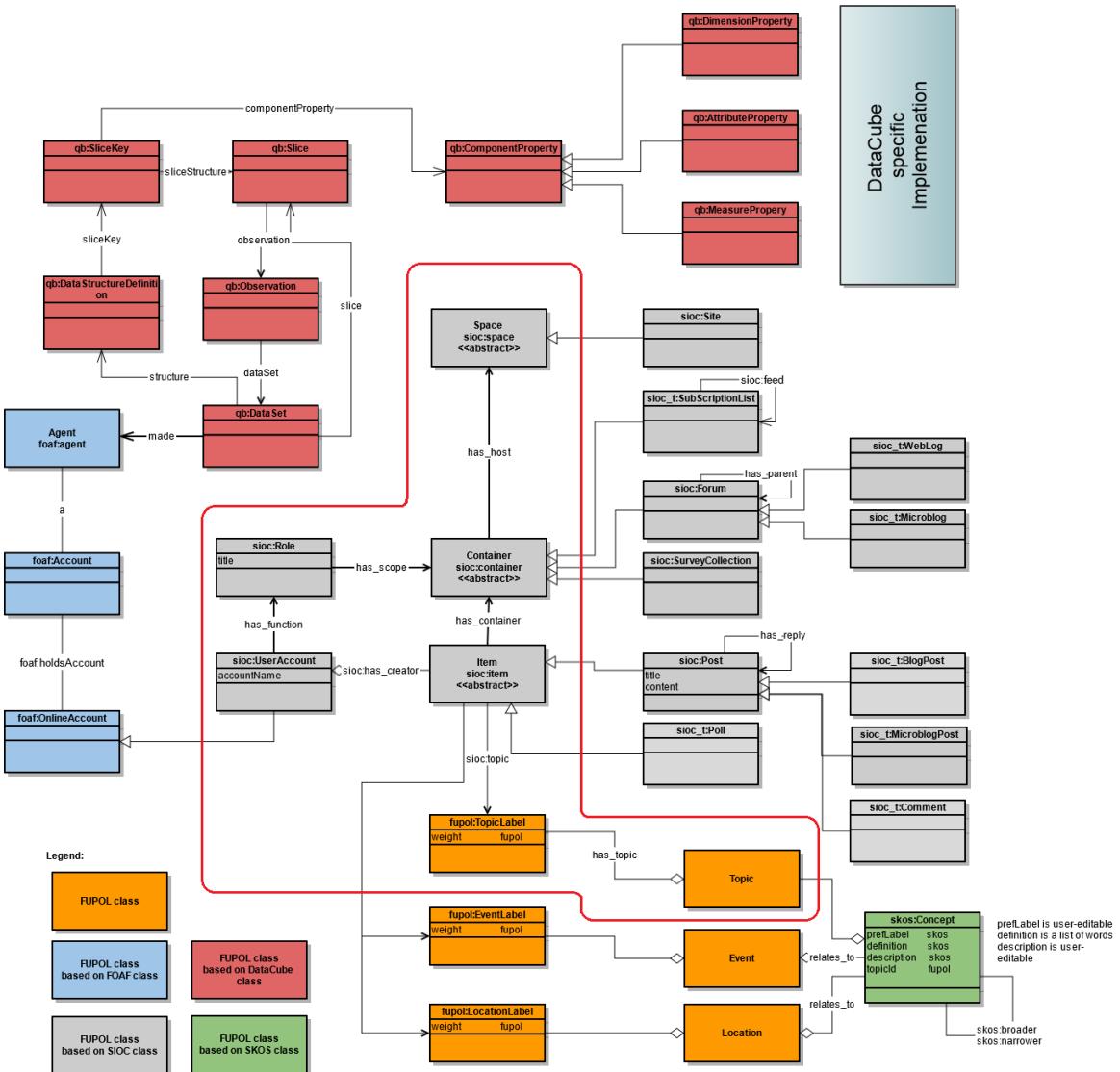
4.3 FUPOL Social Media Ontology and RDF Data Storage

One of the challenges of the FUPOL Core Platform's social media functions was to find or define an appropriate ontology for representing the content. Over the previous six months we made significant progress with semantic web technology:

- Virtuoso is now the RDF triple store that FUPOL uses
- The FUPOL Ontology has been extended to include...
 - Statistical data based on W3C's data cube vocabulary
 - Summarization data was refactored using SKOS (`skos:Concept`) as a base class for topics, locations and events
 - GIS data was added to media content
- Inference was activated in the RDF store

In order to mitigate the technical risk of the RF store's scalability and performance we did some experiments and benchmarks with it (see D3.7, annex IV for details on that). Virtuoso is still running on the FUPOL servers (virtualized) and not in the cloud.

The following diagram describes the current ontology:



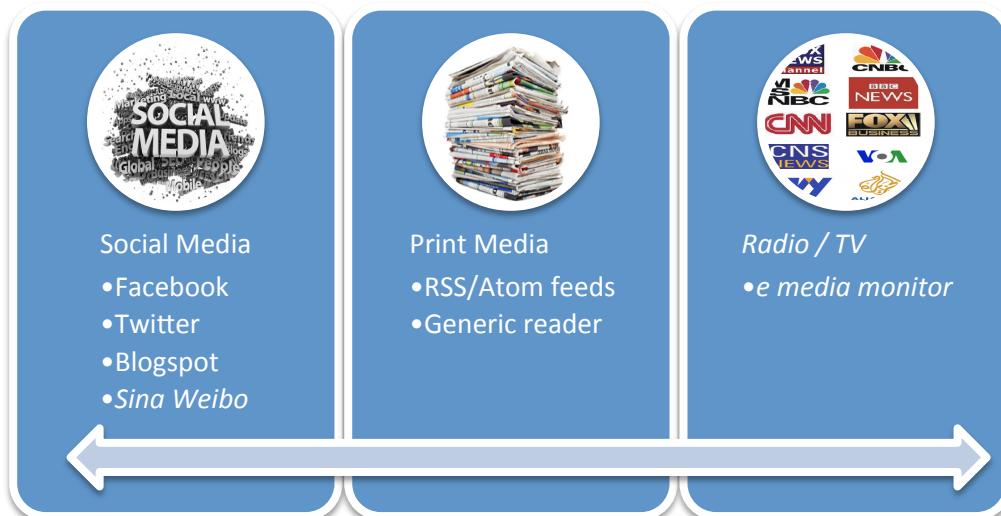
The red concepts are for statistical data and the rest is for semantic data with the orange ones being proprietary FUPOL extensions.

The rest (green and grey classes) is based on SIOC, FOAF, DC and SKOS (green).

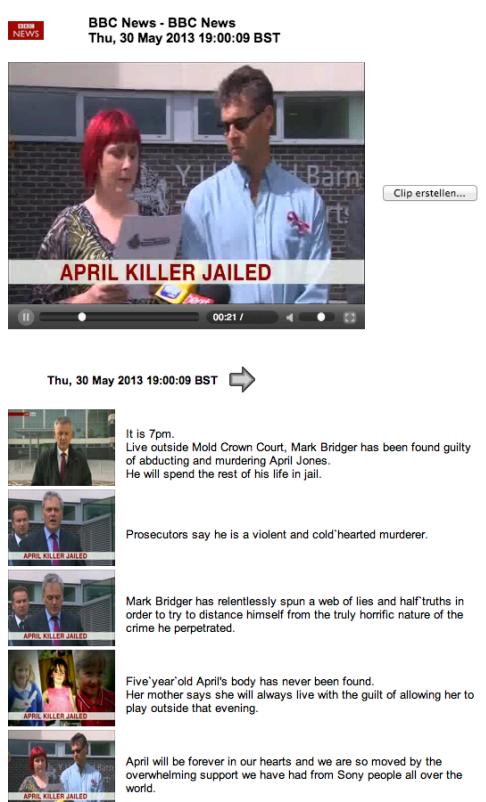
Additional details, especially the mapping of the ontology's concepts to specific social media content (Facebook posts, tweets, blog posts, ...) and a description of the most important classes can be found in D3.6.

The inclusion of statistical data in the ontology and thus in the RDF store allows us to combine both types of data (semantic data and statistical data) in one SparQL query.

As a new channel (that comes with RSS) we've added a speech-to-text service that is able to transcribe tv/radio broadcasts to posts, allowing us to do 24x7 cross-media coverage (note that the service, based on eMedia Monitor, is commercial):



The next screenshot shows eMedia Monitor's user interface. Later versions of FUPOL (outside of this project's scope) might add audio and video support to the platform (including an electronic program guide to select the broadcasts).



The screenshot shows a video player and a news article. The video player displays a BBC News broadcast from May 30, 2013, at 19:00 BST, showing a woman and a man. A red banner at the bottom of the video says "APRIL KILLER JAILED". The news article below the video provides details about the conviction of Mark Bridger.

BBC News - BBC News
Thu, 30 May 2013 19:00:09 BST

APRIL KILLER JAILED

It is 7pm. Live outside Mold Crown Court, Mark Bridger has been found guilty of abducting and murdering April Jones. He will spend the rest of his life in jail.

Prosecutors say he is a violent and cold-hearted murderer.

Mark Bridger has relentlessly spun a web of lies and half-truths in order to try to distance himself from the truly horrific nature of the crime he perpetrated.

Five-year-old April's body has never been found. Her mother says she will always live with the guilt of allowing her to play outside that evening.

April will be forever in our hearts and we are so moved by the overwhelming support we have had from Sony people all over the world.

EMM currently supports seven languages (English, Spanish, German, Arabic, French and others) and collects audio and video content from more than 330 channels in 30 countries. Combining content analysis across traditional and social media might add huge value in understanding political opinions. For example in the UK private radio stations are important in setting the public opinion.



5 Deployment View

The current pilot system is equal to the proposed “demo system” and hosted on the FUPOL virtualized server(s). Cloud hosting is not available yet.

For a detailed description of the deployed system we refer to D3.2 (however we’ve temporarily removed the dedicated integration stage in the meantime).

Although it was necessary to isolate the various server stages maintaining their functionality has been difficult sometimes, mostly because there are so many servers, products and technologies involved. Especially the server setup for performing the automated regression tests was and is difficult.

5.1 Physical Servers and Development/Test/Demo Hardware

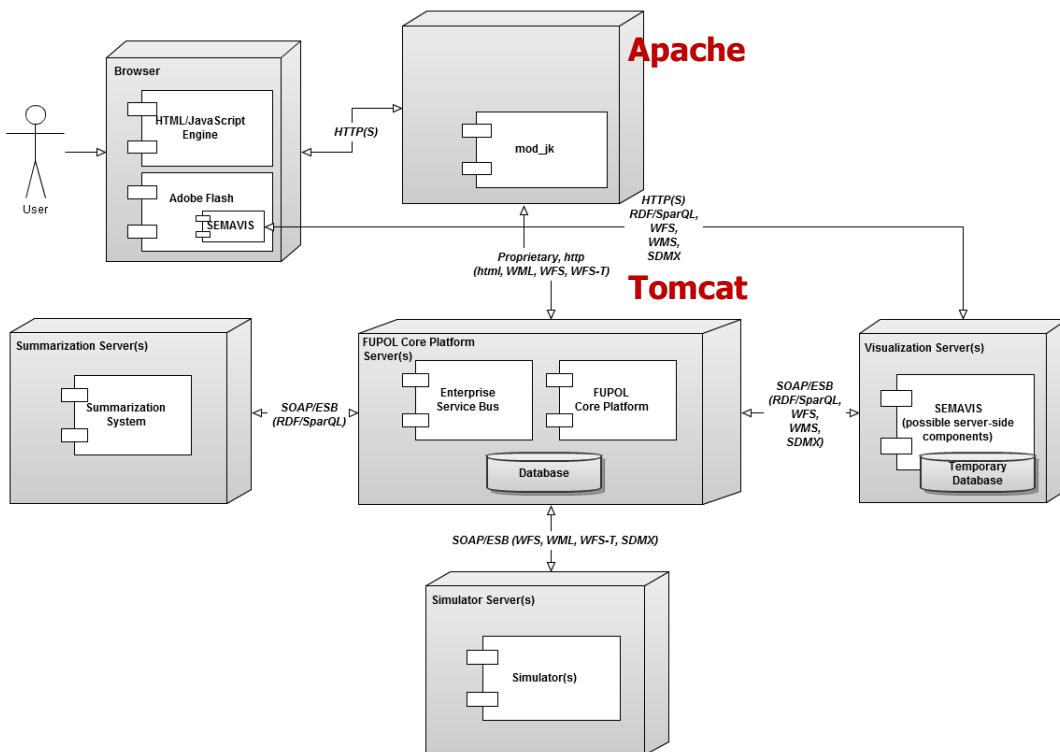
D3.2 contains a detailed description of the FUPOL project's server hardware and the software infrastructure.

There was an issue with the stability of the storage system in the project years 1 and (in the first 3 months of) 2, but this was solved with support from IBM. Besides the usual system patches and updates we've not changed anything else.

5.2 Web Server

Currently a Tomcat servlet container is hosting the FUPOL Core Platform (with an Apache in front). The application is deployed as a WAR file.

FUPOL Core Platform, Technical Context



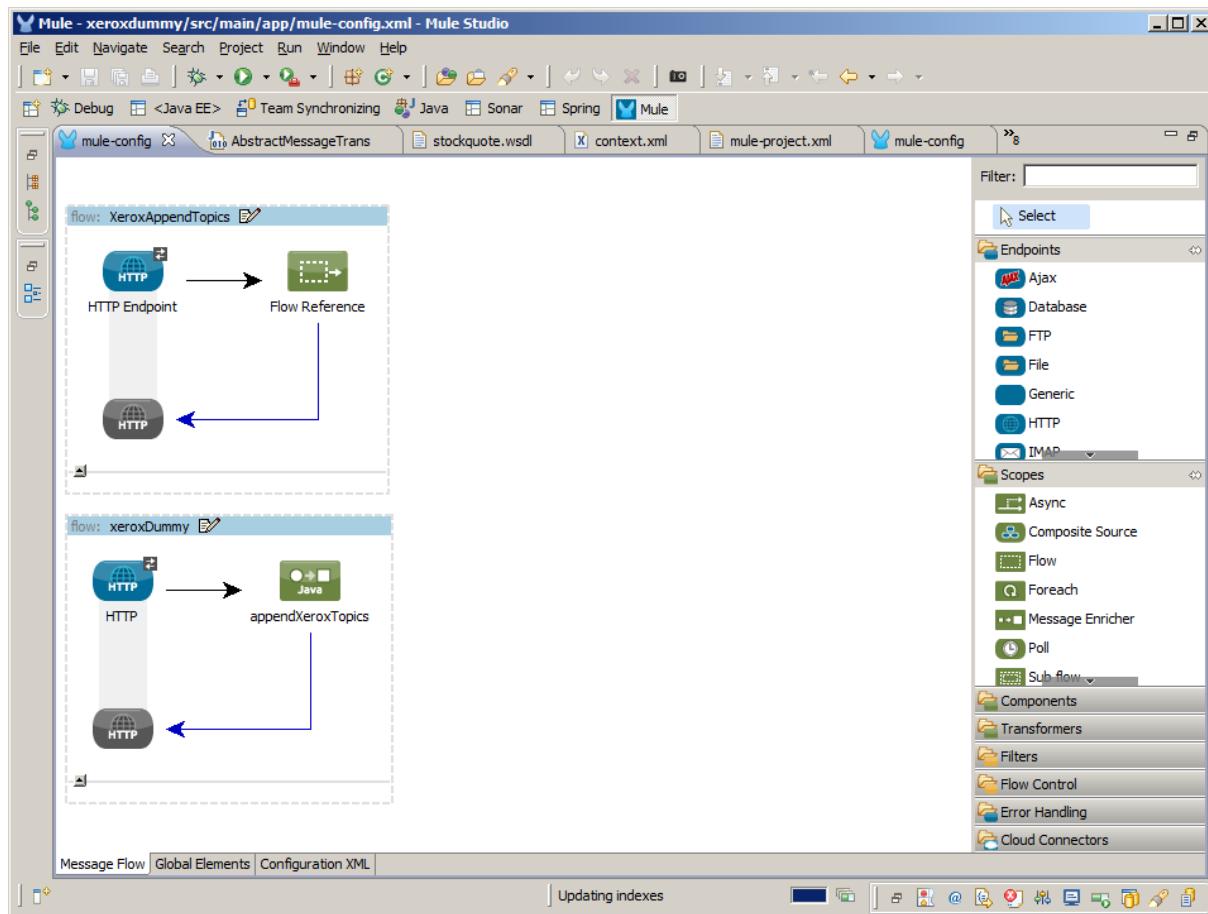
Recently we've split the FUPOL Core Platform into two separate deployables:

- A web application for the FUPOL Core Platform itself (including everything but the services, most notably the user interface)
- A web application for the services (i.e. the scheduler)

The client application and the administrative client were merged in September 2013.

5.3 Enterprise Service Bus

The MULE ESB is deployed as a WAR-file (version 3.3). The workflows are configured in Eclipse using the MULE plugin:

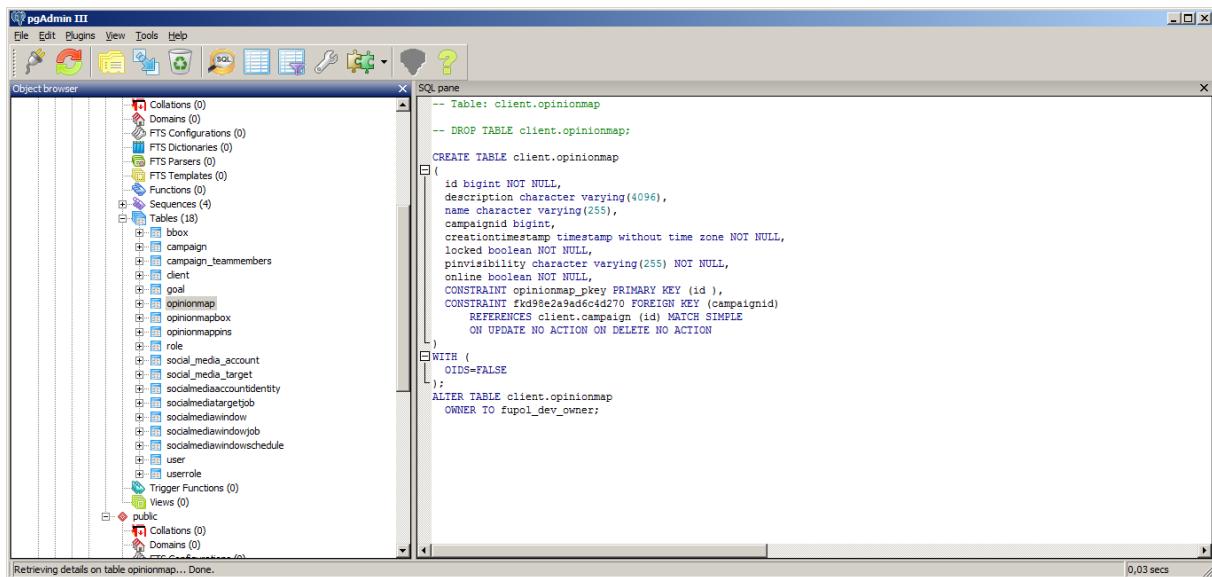


The simulators are attached to the ESB using REST services.

The same applies to the text analysis module (topic extraction).

5.4 Database

Postgres 9.1 is used as the relational database.



The screenshot shows the pgAdmin III interface. The left pane, titled 'Object browser', displays a tree view of database objects. Under 'Tables (18)', several tables are listed: bbox, campaign, campaign_teammembers, client, goal, opinionmap, opinionmapbox, opinionmappns, role, social_media_account, social_media_target, socialmediaaccountentity, socialmediagetjob, socialmedawindow, socialmedawindowjob, socialmedawindowschedule, user, userrole, and views. The right pane, titled 'SQL pane', contains the following SQL code:

```
-- Table: client.opinionmap
-- DROP TABLE client.opinionmap;
CREATE TABLE client.opinionmap
(
    id bigint NOT NULL,
    description character varying(4096),
    name character varying(255),
    campaignid bigint,
    creationtimestamp timestamp without time zone NOT NULL,
    locked boolean NOT NULL,
    pinvisibility character varying(255) NOT NULL,
    online boolean NOT NULL,
    CONSTRAINT opinionmap_pkey PRIMARY KEY (id),
    CONSTRAINT fk395e2a9ad6cd270 FOREIGN KEY (campaignid)
        REFERENCES client.campaign (id) MATCH SIMPLE
        ON UPDATE NO ACTION ON DELETE NO ACTION
)
WITH (
    OIDS=FALSE
);
ALTER TABLE client.opinionmap
OWNER TO fupol_dev_owner;
```

5.5 RDF Store

We've switched from JENA SDB to Virtuoso because JENA SDB didn't scale well, even with low volumes of data.

To validate the applicability of Virtuoso to our domain we've done several experiments and a benchmark test (see D3.7).

Overall we're happy with Virtuoso, but the technology of RDF stores is quite new and immature. Thus there are still some quirks in the software. For example we had memory leaks in Virtuoso's JDBC driver that could only be fixed once OpenLink released a new version.

Regarding the scalability our benchmark tests have validated that it's likely that our single instance server will be able to handle the expected maximum data volumes of the pilot operations. There were no significant drops in performance in relation to the server's data volume.

However an important observation was that the query performance is highly depending on the query's complexity. Sometimes the query takes 10 times longer just by adding a single clause to it.

This means that we have to be very careful when writing queries, especially for the huge queries of the visualization API.

5.6 SparQL Endpoint

During development, especially to support the development of the visualizations, the social media content can be accessed using SparQL with no limits regarding the queries. When we switched to Virtuoso we removed Fuseki (JENA's endpoint).

Virtuoso SPARQL Query Editor

[About](#) | [Namespace Prefixes](#) | [Inference rules](#)

Default Data Set Name (Graph IRI)

Query Text

```
select distinct ?Concept where {[] a ?Concept} LIMIT 100
```

(Security restrictions of this server do not allow you to retrieve remote RDF data, see [details](#).)

Results Format:

Execution timeout: milliseconds (values less than 1000 are ignored)

Options: Strict checking of void variables

(The result can only be sent back to browser, not saved on the server, see [details](#))

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Virtuoso version 07.00.3203 on Linux (x86_64-unknown-linux-gnu), Single Server Edition

6 Test Cases

The following list provides an overview of the current test cases. We list them here as they might be helpful in understanding certain workflows through the application. Please note that the test case definitions contain detailed instructions on how to perform the test case, its prerequisites and the expected outcome.

Detailed test case definitions can be found in D3.7 (annex III).

All system test cases WP3 (FUPOL JIRA)		
Component/s	Key	Summary
Access Management	WP3-545	Sign-In
Access Management	WP3-582	WP3-371 - Authenticate using facebook account
Access Management	WP3-583	WP3-371 - Authenticate using twitter account
Access Management	WP3-584	WP3-367 - Facilitator stops opinion gathering process
Access Management	WP3-585	WP3-367 - Decision maker try to stop opinion gathering process
Access Management	WP3-586	WP3-367 - Communicator try to stop opinion gathering process
Access Management	WP3-587	WP3-367 - Simulation modeler stops opinion gathering process
Access Management	WP3-588	WP3-367 - Domain expert stops opinion gathering process
Access Management	WP3-589	WP3-367 - Communicator with facilitator role stops opinion gathering process
Access Management	WP3-679	WP3-248 - check clients data
Account Management	WP3-540	WP3-483 check email notification link
Account Management	WP3-546	WP3-483 - check links
Account Management	WP3-560	WP3-494 - delete assigned campaign member
Account Management	WP3-561	WP3-494 - delete user of closed campaign
Account Management	WP3-596	WP3-103 - add communicator
Account Management	WP3-597	WP3-103 - add facilitator
Account Management	WP3-598	WP3-103 - add decision maker
Account Management	WP3-599	WP3-103 - add Simulation modeler
Account Management	WP3-600	WP3-103 - add Domain Expert
Account Management	WP3-601	WP3-103 - hyphen in last name
Account Management	WP3-602	WP3-97 - Change password logged in as system operator
Account Management	WP3-603	WP3-97 - Change password logged in as system administrator
Account Management	WP3-604	WP3-97 - Change password logged in as user
Account Management	WP3-605	WP3-103 - check error notifications
Account Management	WP3-606	WP3-103 - check missing role error notification

Account Management	WP3-607	WP3-97 - Check notification errors
Account Management	WP3-608	WP3-103 - username too short
Account Management	WP3-609	WP3-103 - email address considering only at sign
Account Management	WP3-610	WP3-103 - email address considering only postfix including at sign
Account Management	WP3-611	WP3-97 - Check notification error for valid old password
Account Management	WP3-612	WP3-103 - add user with more than one role
Account Management	WP3-613	WP3-97 - new character-password with length > 5 - new character confirm password with length < 5
Account Management	WP3-614	WP3-97 - invalid new character-only-password with length > 5
Account Management	WP3-615	WP3-104 - user list verification
Account Management	WP3-616	WP3-97 - new character-password with length < 5 - new character confirm password with length > 5
Account Management	WP3-618	WP3-90 - Lock all user
Account Management	WP3-619	WP3-90 - Cancel locking all user process
Account Management	WP3-620	WP3-99 - reset password of user
Account Management	WP3-621	WP3-99 - reset own password as system administrator
Account Management	WP3-623	WP3-97 - new digits-password with length > 5 - new digits confirm password with length < 5
Account Management	WP3-625	WP3-97 - new digits-password with length < 5 - new digits confirm password with length > 5
Account Management	WP3-626	WP3-97 - invalid new digits-only-password with length > 5
Account Management	WP3-628	WP3-97 - invalid new digits-only-password with length < 5
Account Management	WP3-629	WP3-97 - invalid new character-only-password with length < 5
Account Management	WP3-630	WP3-98 - Activate user with valid password
Account Management	WP3-631	WP3-98 - Check notification error - Letters only password < 5
Account Management	WP3-632	WP3-99 - cancel reset password of user
Account Management	WP3-633	WP3-100 - Lock user
Account Management	WP3-634	WP3-100 - Unlock user
Account Management	WP3-635	WP3-101 - Delete activated user
Account Management	WP3-636	WP3-101 - Delete locked user
Account Management	WP3-637	WP3-100 - Cancel locking user
Account Management	WP3-639	WP3-101 - Cancel user deletion
Account Management	WP3-640	WP3-98 - Check notification error - Empty password fields
Account Management	WP3-641	WP3-98 - Check notification error - Letters only password > 5
Account Management	WP3-642	WP3-98 - Check notification error - Digits only password > 5
Account Management	WP3-644	WP3-98 - Check notification error - Digits only password < 5
Account Management	WP3-645	WP3-102 edit user by clicking username
Account Management	WP3-646	WP3-102 edit user by clicking edit link
Account Management	WP3-647	WP3-102 edit user and change roles
Account Management	WP3-648	WP3-102 edit other system administrator
Account Management	WP3-650	WP3-116 - Edit account data - check validators for empty fields
Account Management	WP3-651	WP3-116 - Edit account data - check validators for digits only
Account Management	WP3-652	WP3-116 - Edit account data - check validators for letters only

Account Management	WP3-773	WP3-692 - validator for domain expert and eCitizen
Account Management	WP3-775	WP3-692 - validator for simulation modeller and eCitizen
Account Management	WP3-776	WP3-692 - validator for trusted user role
Account Management	WP3-777	WP3-692 - validator for recruiter and eCitizen
Account Management	WP3-778	WP3-692 - validator for communicator and eCitizen
Account Management	WP3-779	WP3-692 - validator for decision maker and eCitizen
Account Management	WP3-780	WP3-692 - validator for facilitator and eCitizen
Campaign Management	WP3-555	WP3-492 - no campaign assigned
Campaign Management	WP3-556	WP3-492 - assigned campaign
Campaign Management	WP3-557	WP3-492 - reassign campaign
Campaign Management	WP3-559	WP3-493 - remove smw owner from campaign
Campaign Management	WP3-562	WP3-495 - active campaigns
Campaign Management	WP3-705	WP3-321 - create a map to collect georeferenced opinions
Campaign Management	WP3-712	WP3-317 - campaign list - my campaigns
Campaign Management	WP3-713	WP3-317 - campaign list - all campaigns
Campaign Management	WP3-714	WP3-138 - close campaign
Campaign Management	WP3-715	WP3-138 - cancel closing campaign
Campaign Management	WP3-716	WP3-138 - close campaign with achievement over 100%
Campaign Management	WP3-717	WP3-138 - close campaign with achievement below 0%
Campaign Management	WP3-719	WP3-317 - campaign detail page
Campaign Management	WP3-720	WP3-317 - closed campaign detail page
Campaign Management	WP3-721	WP3-317 - edit campaign data
Campaign Management	WP3-722	WP3-317 - cancel editing campaign data
Campaign Management	WP3-723	WP3-370 - check authentication of opinionmap
Campaign Management	WP3-725	WP3-168 - cancel opinion creation using twitter credentials
Campaign Management	WP3-726	WP3-168 - create opinion using twitter credentials
Campaign Management	WP3-727	WP3-168 - cancel opinion creation using facebook credentials
Campaign Management	WP3-728	WP3-168 - create opinion check sanitizing
Campaign Management	WP3-729	WP3-168 - edit opinion using twitter credentials
Campaign Management	WP3-730	WP3-168 - edit opinion using facebook credentials
Campaign Management	WP3-731	WP3-168 - cancel editing opinion using facebook credentials
Campaign Management	WP3-732	WP3-168 - cancel editing opinion using twitter credentials
Campaign Management	WP3-733	WP3-168 - edit opinion using twitter credentials, remove whole text
Campaign Management	WP3-734	WP3-168 - edit opinion using facebook credentials, remove whole text
Campaign Management	WP3-735	WP3-168 - create opinion using facebook credentials
Campaign Management	WP3-736	WP3-168 - create opinion using facebook credentials, no text
Campaign Management	WP3-737	WP3-168 - create opinion using twitter credentials, no text
Campaign Management	WP3-738	WP3-392 - show opinion map list
Campaign Management	WP3-739	WP3-363 - collected opinions on opinion map detail view
Campaign Management	WP3-741	WP3-368 - see only my opinions
Campaign Management	WP3-742	WP3-368 - cancel setting opinion visibility to My

Campaign Management	WP3-743	WP3-368 - lock opinion map gathering
Campaign Management	WP3-745	WP3-368 - cancel locking opinion map gathering
Campaign Management	WP3-747	WP3-366 - set opinionmap offline
Campaign Management	WP3-748	WP3-366 - cancel setting opinionmap offline
Campaign Management	WP3-749	WP3-418 - logout from facebook
Campaign Management	WP3-750	WP3-418 - logout from twitter
Campaign Management	WP3-762	WP3-362 - integrate a campaign's map on a homepage
Campaign Management	WP3-875	WP3-818 - delete campaign with originator
Campaign Management	WP3-885	WP3-818 - delete campaign without originator
Campaign Management	WP3-989	WP3-952 - Disable questionnaire
Campaign Management	WP3-990	WP3-952 - enable already disabled questionnaire
Campaign Management	WP3-992	WP3-952 - Cancel setting already disabled questionnaire to enable
Campaign Management	WP3-993	WP3-952 - Cancel disabling questionnaire
Campaign Management	WP3-1000	WP3-944 - enable user authentication for questionnaire
Campaign Management	WP3-1001	WP3-944 - disable user authentication for questionnaire
Campaign Management	WP3-1002	WP3-945 - Add question
Campaign Management	WP3-1003	WP3-945 - cancel add question
Campaign Management	WP3-1004	WP3-946 - edit question
Campaign Management	WP3-1005	WP3-946 - cancel edit question
Campaign Management	WP3-1006	WP3-947 - delete question
Campaign Management	WP3-1007	WP3-947 - cancel delete question
Campaign Management	WP3-1008	WP3-980 - Preview question (adding question)
Campaign Management	WP3-1009	WP3-980 - Preview question (questionnaire view mode)
Campaign Management	WP3-1014	WP3-983 - Add answer - single choice
Campaign Management	WP3-1018	WP3-983 - Cancel add answer - single choice
Campaign Management	WP3-1020	WP3-983 - Add answer - multiple choice
Campaign Management	WP3-1021	WP3-983 - Save question leaving mandatory fields blank
Campaign Management	WP3-1022	WP3-983 - Cancel add answer - multiple choice
Campaign Management	WP3-1023	WP3-983 - Add answer - YES/NO
Campaign Management	WP3-1024	WP3-983 - Cancel add answer - YES/NO
Campaign Management	WP3-1025	WP3-983 - Save question without answers
Campaign Management	WP3-1026	WP3-983 - Add answer - YES/NO/MAYBE
Campaign Management	WP3-1027	WP3-983 - Cancel add answer - YES/NO/MAYBE
Campaign Management	WP3-1028	WP3-983 - Save question with only option "deny answer"
Campaign Management	WP3-1029	WP3-983 - Add answer - Agreement
Campaign Management	WP3-1030	WP3-983 - Cancel add answer - Agreement
Campaign Management	WP3-1031	WP3-983 - Add answer - Rating (3)
Campaign Management	WP3-1032	WP3-983 - Cancel adding answer - Satisfaction
Campaign Management	WP3-1033	WP3-983 - Cancel adding answer - Rating (3)
Campaign Management	WP3-1034	WP3-983 - Add answer - Rating (5)
Campaign Management	WP3-1035	WP3-983 - Cancel adding answer - Rating (5)

Campaign Management	WP3-1038	WP3-983 - Delete answer - single choice
Campaign Management	WP3-1041	WP3-983 - Edit answer - single choice
Campaign Management	WP3-1042	WP3-983 - Delete answer - multiple choice
Campaign Management	WP3-1044	WP3-983 - Delete answer - YES/NO
Campaign Management	WP3-1045	WP3-983 - Delete answer - YES/MAYBE/NO
Campaign Management	WP3-1046	WP3-983 - Delete answer - Agreement
Campaign Management	WP3-1047	WP3-983 - Delete answer - Satisfaction
Campaign Management	WP3-1048	WP3-983 - Delete answer - Rating (3)
Campaign Management	WP3-1049	WP3-983 - Delete answer - Rating (5)
Campaign Management	WP3-1050	WP3-983 - Edit answer - multiple choice
Campaign Management	WP3-1051	WP3-983 - Edit answer - YES/NO
Campaign Management	WP3-1052	WP3-983 - Edit answer - YES/MAYBE/NO
Campaign Management	WP3-1053	WP3-983 - Edit answer - Agreement
Campaign Management	WP3-1054	WP3-983 - Edit answer - Satisfaction
Campaign Management	WP3-1055	WP3-983 - Edit answer - Rating (3)
Campaign Management	WP3-1056	WP3-983 - Edit answer - Rating (5)
Campaign Management	WP3-1057	WP3-949 - Save questionnaire without answers
Campaign Management	WP3-1063	WP3-949 - Embed questionnaire Iframe
Campaign Management	WP3-1090	WP3-916 - Enable hot topic sensing
Campaign Management	WP3-1091	WP3-916 - Disable hot topic sensing
Campaign Management	WP3-1092	WP3-916 - Create campaign with new topic model
Campaign Management	WP3-1093	WP3-916 - Create campaign with cloning an existing topic model
Campaign Management	WP3-1194	WP3-1145 - Check Summary tab of recently added Campaign
Campaign Management	WP3-1214	WP3-983 - Add mixed questions
Campaign Management	WP3-1215	WP3-983 - Add answer - YES/NO with comment
Campaign Management	WP3-1216	WP3-983 - adding answer - Satisfaction
Campaign Management	WP3-1217	WP3-983 - Cancel delete answer - Agreement
Campaign Management	WP3-1218	WP3-983 - Cancellation Delete answer - multiple choice
Campaign Management	WP3-1219	WP3-983 - Cancellation Delete answer - Rating (3)
Campaign Management	WP3-1220	WP3-983 - Cancellation Delete answer - Rating (5)
Campaign Management	WP3-1221	WP3-983 - Cancellation Delete answer - Satisfaction
Campaign Management	WP3-1222	WP3-983 - Cancellation delete answer - single choice
Campaign Management	WP3-1223	WP3-983 - Cancellation delete answer - YES/MAYBE/NO
Campaign Management	WP3-1225	WP3-983 - Cancelation delete answer - YES/NO
Campaign Management	WP3-1244	WP3-818 - delete campaign including opinionmap
Campaign Management	WP3-1245	WP3-818 - delete campaign including questionnaire
Campaign Management	WP3-1246	WP3-818 - delete campaign including questionnaire and opinionmap
Campaign Management	WP3-1247	WP3-818 - delete one of two campaign including opinionmap
Campaign Management	WP3-1249	WP3-321 - create a opinionmap as non team member facilitator
Campaign Management	WP3-1250	WP3-321 - create a opinionmap - no input
Campaign Management	WP3-1251	WP3-321 - create a opinionmap with box outside of the clients bounding box

Campaign Management	WP3-1252	WP3-321 - edit opinionmap
Client Management	WP3-591	WP3-94 - create client with bounding box using input fields
Client Management	WP3-592	WP3-94 - check error notifications on client creation page
Client Management	WP3-593	WP3-94 - create client with bounding box using draw mode
Client Management	WP3-594	WP3-94 - reset already drawn bounding box
Client Management	WP3-595	WP3-94 - cancel client creation process
Client Management	WP3-649	WP3-94 - create client with bounding box using input fields using preview
Client Management	WP3-653	WP3-92 - delete client
Client Management	WP3-654	WP3-92 - cancel client deletion
Client Management	WP3-655	WP3-207 - Check log in validator for active and unlocked user
Client Management	WP3-656	WP3-207 - Check log in validator for active and locked user
Client Management	WP3-657	WP3-93 - edit client data
Client Management	WP3-658	WP3-207 - Sign-in using inactive and locked user
Client Management	WP3-659	WP3-93 - cancel edit client data
Client Management	WP3-660	WP3-93 - edit client data leave name field blank
Data Management	WP3-1241	WP3-995 - Answer Questionnaire including multiple choice question
Data Management	WP3-1242	WP3-995 - Answer Questionnaire including single choice question
Data Management	WP3-1243	WP3-995 - Answer no question of the questionnaire
Operational Support	WP3-691	WP3-280 - See the current FUPOL version on the bottom of the screen
Social Media Management	WP3-533	facilitator browses facebook content
Social Media Management	WP3-534	facilitator browses twitter content
Social Media Management	WP3-535	communicator browses facebook content
Social Media Management	WP3-537	communicator browses twitter content
Social Media Management	WP3-538	decisionmaker try to browse facebook content
Social Media Management	WP3-539	decisionmaker try to browse twitter content
Social Media Management	WP3-547	WP3-491 - assign social media window to campaign
Social Media Management	WP3-548	WP3-491 - assign social media window to closed campaign
Social Media Management	WP3-549	WP3-491 - reassign assigned social media window to campaign
Social Media Management	WP3-550	WP3-491 - campaign member uses social media window
Social Media Management	WP3-551	WP3-491 - client user uses social media window
Social Media Management	WP3-552	WP3-491 - assign already assigned smw
Social Media Management	WP3-553	WP3-490 - storing search results
Social Media Management	WP3-554	WP3-490 - no search results
Social Media Management	WP3-558	WP3-493 - remove campaign assignment
Social Media Management	WP3-563	WP3-475 - check FOAF
Social Media Management	WP3-564	WP3-475 - check SIOC
Social Media Management	WP3-565	WP3-475 - check DUBLIN CORE
Social Media Management	WP3-566	WP3-302 - add one facebook target
Social Media Management	WP3-567	WP3-302 - combine social media targets - two facebook targets

Social Media Management	WP3-568	WP3-302 - add one twitter and one facebook target
Social Media Management	WP3-569	WP3-302 - add one twitter target
Social Media Management	WP3-570	WP3-302 - combine social media targets - two twitter targets
Social Media Management	WP3-571	WP3-302 - search with one facebook target
Social Media Management	WP3-572	WP3-302 - search with one twitter target
Social Media Management	WP3-573	WP3-302 - search with twitter and facebook target
Social Media Management	WP3-574	WP3-302 - right side layout with different targets
Social Media Management	WP3-575	WP3-302 - no twitter keywords
Social Media Management	WP3-576	WP3-302 - no facebook keywords
Social Media Management	WP3-577	WP3-302 - no facebook keywords - submit via return key
Social Media Management	WP3-578	WP3-302 - no twitter keywords - submit via return key
Social Media Management	WP3-579	WP3-302 - save one facebook target - no campaign, no scheduler
Social Media Management	WP3-580	WP3-302 - save one twitter target - no campaign, no scheduler
Social Media Management	WP3-661	WP3-108 - Add facebook account
Social Media Management	WP3-662	WP3-108 - Add twitter account
Social Media Management	WP3-663	WP3-108 - Add facebook account, leave input fields blank
Social Media Management	WP3-664	WP3-108 - Add twitter account, leave input fields blank
Social Media Management	WP3-665	WP3-108 - cancel adding facebook account
Social Media Management	WP3-666	WP3-108 - cancel adding twitter account
Social Media Management	WP3-667	WP3-244 - Validating only a valid Facebook account
Social Media Management	WP3-668	WP3-244 - Validating only a valid Twitter account
Social Media Management	WP3-669	WP3-244 - Validating all valid Social Media accounts
Social Media Management	WP3-670	WP3-108 - pre-check of facebook account credentials, blank input fields, notifications check
Social Media Management	WP3-671	WP3-244 - Checking an invalid Facebook account
Social Media Management	WP3-672	WP3-108 - pre-check of twitter account credentials, blank input fields, notifications check
Social Media Management	WP3-673	WP3-244 - Checking an invalid Twitter account
Social Media Management	WP3-674	WP3-108 - pre-check of facebook account credentials
Social Media Management	WP3-675	WP3-108 - pre-check twitter account credentials
Social Media Management	WP3-676	WP3-108 - pre-check invalid twitter account credentials
Social Media Management	WP3-677	WP3-108 - pre-check invalid facebook account credentials
Social Media Management	WP3-678	WP3-279 - Checking list of invalid Social Media accounts
Social Media Management	WP3-680	WP3-245 - edit twitter account
Social Media Management	WP3-681	WP3-245 - edit facebook account
Social Media Management	WP3-682	WP3-245 - cancel editing twitter account
Social Media Management	WP3-684	WP3-245 - cancel editing facebook account
Social Media Management	WP3-685	WP3-246 - delete facebook account
Social Media Management	WP3-686	WP3-246 - cancel deleting facebook account
Social Media Management	WP3-687	WP3-246 - delete twitter account
Social Media Management	WP3-688	WP3-246 - cancel deleting twitter account
Social Media Management	WP3-689	WP3-279 - Checking list of valid Social Media accounts

Social Media Management	WP3-690	WP3-247 - show list of all Facebook/Twitter accounts and their current status
Social Media Management	WP3-699	WP3-282 - define new Twitter keyword search
Social Media Management	WP3-700	WP3-286 - define new Facebook keyword search
Social Media Management	WP3-701	WP3-282 - cancel defining new Twitter keyword search
Social Media Management	WP3-702	WP3-286 - cancel defining new Facebook keyword search
Social Media Management	WP3-703	WP3-298 - social media content is ordered by timestamp
Social Media Management	WP3-704	WP3-301 - search social media content by social media target list
Social Media Management	WP3-707	WP3-298 - social media content facebook as facilitator
Social Media Management	WP3-708	WP3-298 - social media content facebook as communicator
Social Media Management	WP3-709	WP3-298 - social media content twitter as communicator
Social Media Management	WP3-710	WP3-298 - social media content twitter as facilitator
Social Media Management	WP3-711	WP3-298 - social media content facebook and twitter as facilitator
Social Media Management	WP3-751	WP3-426 - store social media window with facebook keywords
Social Media Management	WP3-752	WP3-426 - cancel storing social media window with facebook keywords
Social Media Management	WP3-753	WP3-426 - cancel storing social media window with twitter keywords
Social Media Management	WP3-754	WP3-426 - store social media window with twitter keywords
Social Media Management	WP3-755	WP3-426 - store social media window with twitter and facebook keywords
Social Media Management	WP3-756	WP3-445 - edit stored social media window
Social Media Management	WP3-757	WP3-445 - cancel editing social media window data
Social Media Management	WP3-758	WP3-446 - delete social media window
Social Media Management	WP3-759	WP3-446 - cancel deletion of social media window
Social Media Management	WP3-813	WP3-466 - Add twitter account, leave input fields blank
Social Media Management	WP3-830	WP3-464 - Add blogspot account, leave input fields blank
Social Media Management	WP3-835	WP3-464 - cancel editing blogspot account
Social Media Management	WP3-836	WP3-464 - checking an valid blogspot account
Social Media Management	WP3-837	WP3-464 - delete blogspot account
Social Media Management	WP3-839	WP3-834 - add targets to the social media target list
Social Media Management	WP3-840	WP3-834 - delete targets from the social media target list
Social Media Management	WP3-841	WP3-834 - edit targets in the social media target list
Social Media Management	WP3-842	WP3-766 - edit social media account identities in the personal data section
Social Media Management	WP3-861	WP3-859 - saving social media content
Social Media Management	WP3-862	WP3-858 - deleting social media content
Social Media Management	WP3-886	WP3-302 - add one facebook wall target
Social Media Management	WP3-887	WP3-302 - edit one facebook wall target
Social Media Management	WP3-888	WP3-302 - delete one facebook wall target
Social Media Management	WP3-894	WP3-404 - add RSS target
Social Media Management	WP3-895	WP3-404 - edit RSS/Atom target
Social Media Management	WP3-896	WP3-404 - delete Atom target
Social Media Management	WP3-897	WP3-299 - edit blogspot blog target

Social Media Management	WP3-899	WP3-299 - add blogspot post target
Social Media Management	WP3-900	WP3-299 - edit blogspot post target
Social Media Management	WP3-907	WP3-404 - delete RSS target
Social Media Management	WP3-908	WP3-404 - add Atom target
Social Media Management	WP3-960	WP3-942 - Try adding questionnaire as none campaign team member facilitator
Social Media Management	WP3-962	WP3-941 - Show Questionnaire List
Social Media Management	WP3-963	WP3-953- View Questionnaires
Social Media Management	WP3-964	WP3-948 - Edit all fields of Questionnaire
Social Media Management	WP3-966	WP3-942 - Add Questionnaire leave input fields empty
Social Media Management	WP3-967	WP3-942 - Add Questionnaire leave title empty
Social Media Management	WP3-968	WP3-942 - Add Questionnaire leave description empty
Social Media Management	WP3-969	WP3-942 - Add Questionnaire enter title and description with one character
Social Media Management	WP3-970	WP3-942 - Add Questionnaire enter title with one character
Social Media Management	WP3-971	WP3-942 - Add Questionnaire enter description with one character
Social Media Management	WP3-972	WP3-942 - Cancel adding Questionnaire
Social Media Management	WP3-973	WP3-942 - Add Questionnaire
Social Media Management	WP3-974	WP3-948 - Edit title of Questionnaire
Social Media Management	WP3-975	WP3-948 - Edit title of Questionnaire as a none-campaignmember with role facilitator
Social Media Management	WP3-976	WP3-948 - Edit description of questionnaire
Social Media Management	WP3-1164	WP3-1142 - delete sina weibo account
Social Media Management	WP3-1168	WP3-1142 - Add Sina Weibo account
Social Media Management	WP3-1169	WP3 1143 - Show heat map
Social Media Management	WP3-1170	WP3-1142 - Edit Sina Weibo account
Social Media Management	WP3-1171	WP3-1142 - Cancel deleting Sina Weibo account
Social Media Management	WP3-1172	WP3-1142 - Checking an invalid Sina Weibo account
Social Media Management	WP3-1173	WP3-1142 - Validating only a valid Sina Weibo account
Social Media Management	WP3-1174	WP3-1142- pre-check invalid Sina Weibo account credentials
Social Media Management	WP3-1175	WP3-1142 - cancel adding Sina Weibo account
Social Media Management	WP3-1176	WP3-1142 - Add Sina Weibo account, leave input fields blank
Social Media Management	WP3-1177	WP3-1141 - add one Sina Weibo target
Social Media Management	WP3-1178	WP3-1141 - save one sina weibo target - no campaign, no scheduler
Social Media Management	WP3-1179	WP3-1141 - search with one sina weibo target
Social Media Management	WP3-1180	WP3-1141 - add targets to the social media target list
Social Media Management	WP3-1181	WP3-1141 - edit targets in the social media target list
Social Media Management	WP3-1230	WP3-299 - add blogspot blog target
Social Media Management	WP3-1231	WP3-299 - add blogspot blog target no URL
Social Media Management	WP3-1232	WP3-299 - add blogspot blog target no http prefix
Social Media Management	WP3-1233	WP3-302 - add one facebook wall target with not existing wallname

Social Media Management	WP3-1234	WP3-302 - add one facebook wall target without http prefix
Social Media Management	WP3-1236	WP3-464 - Add blogspot account
Social Media Management	WP3-1237	WP3-464 - edit blogspot account
Social Media Management	WP3-1238	WP3-464 - edit blogspot account - no input
Social Media Management	WP3-1239	WP3-464 - Cancel adding blogspot account
Social Media Management	WP3-1240	WP3-464 - cancel delete blogspot account
Social Media Management	WP3-1248	WP3-464 - edit blogspot account
Social Media Management	WP3-1253	WP3-302 - add one facebook wall target with groupname only
Social Media Management	WP3-821	closing a closed campaign

7 User Manual

In order to support the users in the pilot city (and to prevent resource drain caused by personal phone/email support) WP8 wrote a user manual.

This manual is available in electronic form (as a set of wiki pages) and as printed documentation.