

Action IC1302
Semantic keyword-based search on structured data sources (KEYSTONE)

Riva del Garda, 17 October 2014

Subject | Minutes of the Third Management Committee Meeting of COST Action IC1302 “Semantic keyword-based search on structured data sources (KEYSTONE)”

Riva del Garda, Trentino, Italy
17 October 2014

1. Reception of the participants

The meeting took place in the Conference Centre of Riva del Garda (Trento, Italy). The meeting started at 14:00, on the 17th October 2014.

Dr. Francesco Guerra, Chair of the management Committee of the Action, read the attendance list in order to check that there was quorum. After a few minutes, the quorum was achieved (22 countries out of 27, see Participants list in Annex 1) and the meeting began.

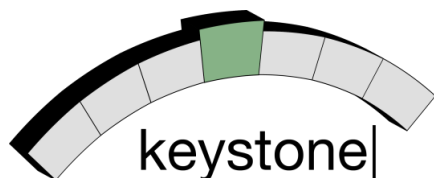
2. Welcome to participants

The participants were welcomed by Dr. Francesco Guerra and Dr. Yannis Velegrakis (Local Organizer of the meeting).

3. Adoption of the agenda

Dr. Francesco Guerra presented the agenda of the meeting (see Agenda in Annex 2). The draft agenda for the third MC meeting of the Cost Action IC1302 was adopted. After that, Francesco Guerra continued his presentation using some slides to support it (Annex 3).

4. Approval of minutes and matters arising of last meeting



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Dr. Francesco Guerra indicated that the minutes of the last ESB meetings were available at the Keystone since several weeks ago. The website is the place where it is possible to find all the information about the KEYSTONE and MC members are invited to check the website periodically.

5. Update from the Grant Holder

Firstly, Dr. Francesco Guerra presented the MC members from new countries participating in the Action (Slovakia, Slovenia). Then, he listed the countries of the Action's participants and talked about gender balance in the Action. He pointed out that the gender balance of participants were on average if we consider that Computer Science is typically an unbalanced area.

Secondly, Dr. Francesco Guerra talked about the budget status of the Action. The current meeting was the last event of Action Grant period and a little amount of the total budget will not be spent (around 15.000 euro). He also indicated that at that moment it was not possible to organize a new meeting before the end of the year in order to spend the little amount available.

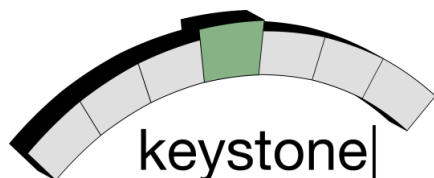
Thirdly, Dr. Francesco Guerra presented the number of STSMs already done in terms of number of participants, countries involved (origins-destinations), duration of the STSMs, etc. Besides, he indicated that all proposals received in 2014 were approved (actually, there was no selection, since we had enough budget for all the requests). He also indicated that it is not possible to perform a STSM covering two Grant periods (e.g. a STSM starting in 2014 and finishing in 2015) due to COST constraints. Finally, he presented a proposal developed with Dr. Abdulhussain Mahdi (the STSM coordinator) for the STSM in 2015. After some discussion it was decided:

- Maintaining the criteria to evaluate the applications for STSMs
- Organizing 3 calls (plus one optional) for STSMs proposals in 2015 (one in January, other in February, other in April and the optional call in June if all the budget available for STSMs is not spent in the previous calls).
- Pushing people from countries involved in the inclusiveness policy to submit proposals for STSMs.
- Ranking the different proposals received in the different calls according to criteria already approved.

6. Promotion of gender balance and of Early Stage Researchers (ESR)

Some proposals for promoting gender balance in Computer Science area and the participation of women in KEYSTONE will be done. Some flyers about the action COST IC1302 will be given out during the Girls' Day of the University of Zaragoza (Spain). Moreover, Dr. Andrea Cali promised to organized a similar event in the Birkbeck University of London where he works.

Regarding to ESRs Dr. Francesco Guerra indicated the absence of knowledge about how many ESRs are already part of the Action and he asked the members of



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Management Committee to support him in the creation of a list of ESR people in their countries.

7. Update from the Action Chair

The main rules about reimbursements were explained. Dr. Francesco Guerra also reminded attendants that the forms generated by the e-COST system for the meeting in Riva del Garda must be sent to him before 18th November and asked participants for sending them as soon as possible.

After that, Dr. Francesco Guerra proposed a change in the budget approved previously in order to increase the amount of money for STSMs. The change was approved (see Annex 5).

8. News from the COST Association

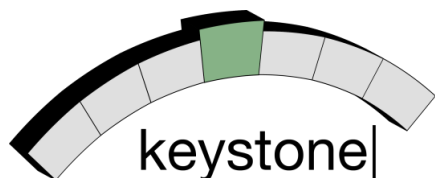
Dr. Francesco Guerra indicated that a new COST Scientific Officer was assigned to the action COST IC1302 (Dr. Giuseppe Lugano). DR. Lugano participated in the ESB Meeting in September and now knows the status of our Action. After that, Dr. Francesco Guerra talked about the changes in the COST framework and the new policies of COST as described by Dr. Lugano in the recent meeting. In particular, Francesco insisted on: Supporting the excellence by being open and inclusive, promoting the connection with the industry, fostering the cooperation among countries and the international cooperation, and promoting activities for ESR and for achieving gender balance.

9. Update from the DC Rapporteur

Dr. Francesco Guerra indicated that he provided the DC Rapporteur (prof. Doina Banciu), Responsible of the action this year (2014), some indications for evaluating KEYSTONE. He also indicated that no news from DC Rapporteur had been received up till now, so we actually do not know how the Action has been evaluated. Finally he said that rules changed and, in next years, there would not be DC Rapporteur. That role has disappeared in the new evaluation system of the COST Actions.

10. Annual Progress Conference (feedback from the meeting)

Dr. Francesco Guerra participated in April in the Annual Progress Conference, where all the COST Actions are evaluated by the DC members. This was the occasion to meet other Action's Chairs. Some connections with people belonging to other Actions interesting for KEYSTONE will be planned on the basis of the contacts established in the meeting. Moreover, a new country, Slovakia, is part of the Action, thanks to the APC meeting.



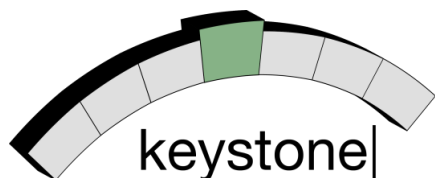
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**11. Follow-up of MoU objectives (Progress report of working groups) /
 12. Scientific planning**

The subsequent activity in the MC meeting was devoted to prepare and discuss the W&B plan for the next Grant Period (Dec 2014- Dec 2015).

Firstly, the specific goals of the Action IC1302 were enumerated. Besides, for each goal it was discussed how much their level of completion was (25%, 50%, 75% or 100%). A motivation to be associated to each level was discussed, as follows:

Action Objectives as defined in the MoU and level of Achievement: Objective as described in MoU	Current Level of Achievement in %				
	0	25	50	75	100
1) Creation of a network of researchers working in the field of keyword search over structured databases	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2) Promote the development of novel techniques for keyword-based search over structured data sources	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3) Promote a critical analysis of the emergent techniques for keyword-based search in structured data sources, identifying and critically reviewing the most promising approaches	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4) Enable the creation of networks and discussion forums/ mailing lists with the support of new web technologies for sharing ideas and promoting joint and multidisciplinary ideas and promoting joint and multidisciplinary research	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5) Enable the development of a conceptual map on open and closed issues related to the Action themes	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6) Support the discussions and idea sharing among early-stage and senior researchers by means of training schools and symposia, and by promoting visiting activities and exchanges through Short-Term Scientific Missions	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7) Support the development of scenarios, showcases and benchmarks for evaluating and comparing approaches and prototypes	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8) Facilitate the transfer of knowledge and technology to the scientific community, practitioners and the enterprises	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9) Enable the participation and organisation of meetings and events with people from industry or government promoting the reuse of the Action outcomes in professional applications	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10) Build a critical mass of research activities and outcomes that achieve the sustainability of the research themes beyond the Action	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11) Collect all the related material (slides, tutorials and other training materials, scientific papers, prototypes, datasets,	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



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scenarios and benchmarks) developed within the Action in an open annotated bibliography for improving dissemination, reuse and extension					
12) Enlarge the network of academic and professional researchers beyond those initially involved in the preparation of the Action	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
13) Promote the publication, use and sharing of open structured data through the web	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14) Involve internationally recognized research centers working in the Action themes	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>
15) Develop cooperation relations among European research institutions to perform joint activities beyond those proposed in the Action (the participation in other research proposals, the development of joint doctorate courses, ...)	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Justification of the evaluation provided

Objective 1: In the first year we have created a network of researchers that now has to be consolidated. We started with 15 countries participating in the 1st MC Meeting and now we are 27 countries. We think that we reached a significant number of involved countries and that now we have to work on making people collaborate with each other.

Objective 2: Several teams published new techniques for keyword search. 11 STSMs have been funded. Research activities started and new techniques (enabled by the Action's work) will be published in the literature. Now we have to work in supporting inter-team / inter-country research.

Objective 3: In the meetings organized in 2014 we analysed techniques for querying big data and the semantic web by inviting keynote speakers. The website implements a repository for collecting related papers in the field.

Objective 4: KEYSTONE has a twitter channel, a LinkedIn group, 4 mailing lists and a website where people can publish and share their activities. Since the communications flow is low, we have to work on promoting it.

Objective 5: In the meetings organized in 2014, during the brainstorming sessions we analysed open and closed issues. A white paper about Semantic Keyword search in Big Data has been published and a second white paper about "Querying the Semantic Web" is scheduled.

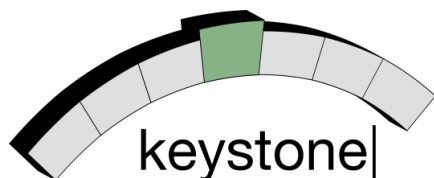
Objective 6: 11 STSMs have been supported in 2014. We think that this is an interesting result for an Action which has just started.

Objective 7: The website contains a section for collecting and publishing datasets. We will work on the population of this section in 2015.

Objective 8: In 2015 we will organize a training school and other events with enterprises enabling dissemination and knowledge transfer.

Objective 9: In 2015 we will experiment new activities aiming to involve enterprises.

Objective 10: There are 151 WG Members in KEYSTONE. The brainstorming sessions ("team building" exercises organized during the meeting) have enabled the establishment of relationships that will continue after the end of the Action.



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Objective 11: The website contains a section for collecting and publishing training material. The section will contain the material of the training school scheduled for July 2015.

Objective 12: We started with 15 countries participating in the 1st MC Meeting and now we are 27 countries. We think that the main work now is to consolidate the network of WG participants.

Objective 13: The panel session organized in the 2nd WG meeting was about the use of Open Data by enterprises in real scenarios. This work and the research work done by WG Members contribute to the use and re-use of open structured data.

Objective 14: The network of WG Members already includes people from internationally acknowledged research centers.

Objective 15: Several research teams belonging to KEYSTONE have jointly worked in applications sent to H2020 calls and to other calls for proposals.

Then, Dr. Francesco Guerra proposed a set of goals to be achieved in 2015 (as indicated in slide 23 of Annex 3).

After some discussions and integrations, the MC decided that

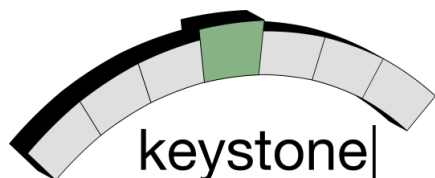
All the activities (i.e., the research topics explored during the meetings, the other networking and coordination tools promoted by the Action and the research activity jointly addressed by the WG members) will be built around 4 main “specifications” of the general theme related to “keyword search in large amounts of data”:

1. Development of techniques and tools for search and analytics;
2. Study of scalable techniques;
3. Application of semantics;
4. Use of open data;

Working in this field will allow KEYSTONE to continue the research activity started in 2014 by elaborating on topics related to keyword search in big data. The first WG meeting, held in Leiden in Springer 2014, discussed topics related to semantic keyword search in big data. During the meeting, a white paper containing the results achieved in the brainstorming sessions, available in the Action website, will be the starting point of the next activity. Working with large amounts of data generates also other advantages to the WG participants who will be steered and aligned to address and work in research problems identified as important by the EU in H2020 (see, for example, call ICT 16).

The main goals to be achieved in the next grant period will be:

1. Enabling new joint research activities in the field of keyword search over structured databases, with particular reference to techniques for dealing with large amount of data



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2. Analysing and disseminating the results achieved in the literature in keyword search over large amount of data (including the ones achieved in KEYSTONE)
3. Promoting the discussion among research teams having different expertise, working in different scenarios, using different methodologies with the goal of developing new and inter-disciplinary techniques and applications
4. Consolidating the network of the Action participants through an analysis of the expertise / research activities of the WG Members to assess the potential “knowledge” and “capability” of the network of researchers
5. Involving enterprises by developing a map of the companies that could be interested in the Action (i.e., working in the field and / or providing suitable scenarios for evaluating the techniques developed in KEYSTONE)

Moreover, the discussion about the activities to be done for achieving the aforementioned goals started.

The proposal, discussed and approved by the MC meeting, was about the organization in 2015 of:

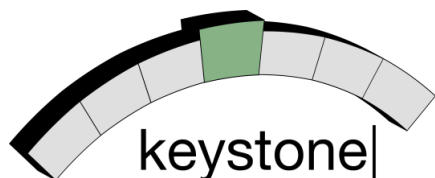
1. an open conference
2. a training school
3. a MC + WG Meeting

The MC focused about the organization of the Open Conference and it was decided that:

- The country where it will be celebrated will be Portugal.
- Dr. Jorge Cardoso will be involved in the local organization.
- A call for the organization will be opened around 15 November.
- The conference must have at least 2 parts: one for presentation of papers and another focused on hands-on and interacting activities.
- The conference will be celebrated between June and October 2015.
- The proceedings of the conference will be published in a known editorial (for example Springer).
- The topics of the conference will be related to: Scalable Techniques, Semantics, Analytics, Search, Large amount of data and Open data, Smart data, Big Data. Nevertheless the title of the conference will be decided by the organizers.
- The different proposals will be considered and/or merged to organized the conference.

About the Training School was decided that:

- It will last 5 days.
- Dr. Charlie Abella will organize the school supported by some MC members selected through a call for volunteers
- There will be 5-8 teachers. The amount for teachers will be 8000 euros.
- The amount for grants for students will be 10000 euros, around 500 euro per grant.



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- The amount of money for local organization will be 4000 euros.
- The date of celebrating of the school will be when the prices of flights, accommodation were cheaper.

To increase the participation of the industry in the action, the industrial advisory board will publish a Call for Industrial Partners in two levels: one oriented to big providers and one oriented to industries focuses on end-customers. Moreover, it was decided to increase the number of members of the industrial board.

About the MC meeting, it was decided that:

- A meeting similar to the current one will be celebrated next year in Slovakia, more specifically in Kosice.
- Some WG members will be invited by using the budget saved during the year.

Finally, it was decided that material (such as the current newsletter) about the action for disseminating the activities of the action in national conference will be created.

13. Request for new members and Non-COST applications to the Actions

Dr. Francesco Guerra showed the list of WG Members with some new proposals (see Annex 4)

Dr. Francesco Guerra explained how countries not included in the European Union could participate in the action:

- NNC: They are countries geographically closed to The Europe Union such as Albania. Their participation has to be approved by the MC of the action and by the COST officer. Their rights are similar to the ones of the European Union members.
- IPC: They are countries not closed to Europe such as Australia, Chile, etc. Their members cannot be funded for meetings but their members can be trainers in school. Moreover, they can also receive STSMs.

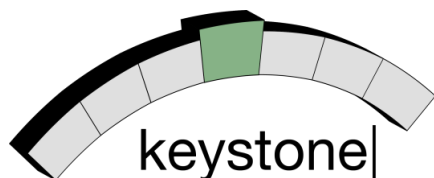
Dr. Francesco Guerra said that Albania would ask for being a member soon.

14. AOB

Nothing to be discussed.

15. Location and date of next meeting

It was approved that next meeting will be in Portugal with the Open Conference. However, the date has to be decided yet. Dr. Francesco Guerra reminded that each member should express their interest in participating at least 30 days before the meeting data.



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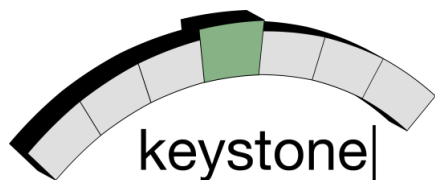
16. Summary of MC decisions

A list of the different electronic approvals done since the last meeting was showed:

- ▶ List of electronic approvals since the 2° MC meeting
 8. Minute of the 2nd MC Meeting
 9. List of the WG Members - Update
 10. STSM results call 2 and new call
 11. business plan change
 12. STSM results call 3
 13. List of the WG Members - Update
 14. Changes in the business plan
- ▶ List of STSMs approved

STSM Topic	Participant	From:	To:	Start:	End:
From Recommender Systems to Personalized Academic Search Engines	Mr Stefan Langer Otto-von-Guericke UniversitÄt Magdeburg, Magdeburg, Germany	DE	CY	04/06/2014	03/07/2014
Extraction and representation of place names for the reconstruction of itineraries from texts	Mr Ludovic Moncla LIUPPA laboratory, UniversitÄ de Pau et des Pays de l'Adour	FR	SP	09/06/2014	04/07/2014
Semantic Classification of liver radiological reports	Dr MarÄa del Mar RoldÄn-GarcÄa Universidad de Malaga, Malaga, Spain	SP	TK	22/06/2014	28/06/2014
Context information extraction from social media structured sources	Dr Georgia Kapitsaki University of Cyprus, Aglantzia, Cyprus	CY	NL	14/07/2014	10/08/2014
Semantic and crowdsourced keyword-based search	Dr Marco Brambilla, Politecnico di Milano, Milano, Italy	IT	FR	14/07/2014	18/07/2014
Improvement of automatic formalization processes for thesauri	Dr Javier Lacasta Universidad de Zaragoza, Zaragoza(ES)	ES	CH	20/07/2014	17/08/2014
Keyword based Search Foundations	Prof. Jorge Cardoso, The University of Coimbra, Coimbra, Portugal	PT	IT	31/08/2014	06/09/2014
Exploratory- and Keyword- Based Design of Data-Intensive Scientific Workflows	Dr Khalid Belhajjame UniversitÄ Paris-Dauphine, Paris(FR)	FR	NL	09/09/2014	18/09/2014
Keyword search on relational data in the Deep Web	Dr Andrea Cali University of London, Birkbeck College, London, UK	UK	IT	05/10/2014	11/10/2014
keyword search on graph data	Dr Paolo Missier Newcastle University, Newcastle upon Tyne, UK	UK	IT	13/10/2014	22/10/2014
Improving users' search behaviour	Claudia Hauff, Delft University of Technology, Delft, Netherlands	NL	CH	20/10/2014	25/10/2014

17. Closing



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The chair of the Action, Dr. Francesco Guerra, closed the MC meeting and encouraged the attendants to enjoy the rest of the activities of the COST Action IC 1302 in the afternoon, and the next day (18th October). The meeting closed at 16:00.