HOBBIT

Collaborative Project

Holistic Benchmarking of Big Linked Data

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Deliverable 7.2.1
First Workshop Organization Report

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Abstract: This deliverable comprises the overview report of the organization of the first round of HOBBIT workshops, in which the results of the HOBBIT challenges have been presented.

History

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0.2	19/01/2018	Peer Reviewed	Filipe Teixeira (TOMTOM)
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1.0	23/01/2018	Final version created	Vassiliki Rentoumi & Grigorios Tzortzis (NCSR-D)

Author List

Organization	Name	Contact Information
NCSR-D	Vassiliki Rentoumi	vrentoumi@iit.demokritos.gr
NCSR-D	Grigorios Tzortzis	gtzortzi@iit.demokritos.gr

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Executive Summary

This deliverable includes a report focusing on the organization of the first round of the HOBBIT workshops in which the first round of the HOBBIT challenges' results have been presented. Three challenges, namely the Mighty Storage Challenge (MOCHA), the Open Knowledge Extraction challenge (OKE) and the Question Answering over Linked Data challenge (QALD) have been organized at the ESWC 2017 conference and hosted under a common workshop session in May 2017. Furthermore, the Link Discovery Task organized by the HOBBIT project has been held within the context of the Ontology Matching (OM) workshop at the ISWC 2017 conference in October 2017, and the DEBS Grand Challenge which was co-organized by the HOBBIT project took place at DEBS 2017 in June 2017. 25 persons attended the 9 presentations of the ESWC 2017 workshop session for MOCHA, OKE and QALD challenges. Additionally, 90 persons attended the 8 presentations of the DEBS Grand Challenge session within DEBS 2017. Finally, the Link Discovery Task held within the context of the OM workshop had 25 attendees.

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1   Introduction

Given that the main objective of WP7 – Evaluation Campaigns is to organize benchmarking campaigns in order to measure the fitness of implemented systems for processing Big Linked Data using the benchmarks defined by HOBBIT[1], the main goal of the first round of HOBBIT workshops was to allow for challenge participants to present and promote their developed systems, as well as for challenge organizers to showcase the results of the evaluation campaigns (i.e. challenges) to the public. In particular, HOBBIT organized the following challenges:

- the MOCHA challenge at ESWC 2017

- the OKE challenge at ESWC 2017

- the QALD challenge at ESWC 2017

- the DEBS Grand Challenge at DEBS 2017

- the HOBBIT Link Discovery Task at OAEI OM 2017 Workshop at ISWC 2017

In the following sections we present the full organization procedures undertaken for the first series of HOBBIT workshops. In Section 2.1 we present the organization procedures undertaken for the organization of the ESWC 2017 workshop session which hosted the presentation of systems and their results of the three HOBBIT challenges (MOCHA, OKE and QALD) at the ESWC conference[2]. In Section 2.2 we present the organization procedures followed for the organization of the DEBS Grand Challenge session held within the context of DEBS 2017[3]. In Section 2.3 we present the organization steps followed for the organization of the Link Discovery Task hosted under the OM workshop session which was held at the ISWC 2017 conference[4]. Finally, Section 3 concludes this deliverable by presenting the HOBBIT workshops that will be organized by HOBBIT in 2018.

Additional information on the first series of HOBBIT challenges can be found on the project's website[5], as well as in related deliverables: D7.1.1 – First Workshop Proceedings, D7.3.1 – First Challenge Results Overview and D7.4.1 – First Challenge Evaluation. D7.1.1 reports on the proceedings of the challenges, D7.3.1 reports on the benchmarks, the challenges' tasks, and the participating systems and their results, and D7.4.1 reports on the quantitative and qualitative evaluation of the challenges.

2   First Workshops Organization

2.1   ESWC 2017 Workshop Organization for MOCHA, OKE and QALD challenges

The MOCHA, OKE, and QALD challenges' results and systems have been presented under a common workshop session at the ESWC 2017 conference in May 2017. We needed this venue to be the place where experts from the semantic web and big linked data domains come together to present their systems and results towards the tasks provided by the MOCHA[6], OKE[7] and QALD[8] challenges. The

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[1] https://project-hobbit.eu/outcomes/
[2] https://2017.eswc-conferences.org/call-challenges
[3] http://lsd1.ls.fi.upm.es/debs2017/call-for-grand-challenge-solutions/
[4] https://iswc2017.semanticweb.org/
[5] https://project-hobbit.eu/
[6] https://project-hobbit.eu/challenges/mighty-storage-challenge/
[7] https://project-hobbit.eu/challenges/oke2017-challenge-eswc-2017/
[8] https://project-hobbit.eu/challenges/qald2017/

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Call For Papers for each of the three challenges' workshop session has been published in WikiCFP[9] and EasyChair Smart CFP[10]. Furthermore we sent out the Call For Papers for all the three aforementioned HOBBIT challenges to 95 mailing lists which are reported below (the CFPs can be found in Appendix A):

- CHI-ANNOUNCEMENTS@listserv.acm.org

- DC-VOCABULARY@jiscmail.ac.uk

- GATE-users@lists.sourceforge.net

- IRList@lists.shef.ac.uk

- TextAnalytics@yahoogroups.com

- ai-sges@jiscmail.ac.uk

- aic-seminars@ai.sri.com

- aisworld@lists.aisnet.org

- alp@mail.cs.nmsu.edu

- annotator-discuss@googlegroups.com

- appontresearch@lists.stanford.edu

- bioinfo@sfbi.fr

- bull-i3@irit.fr

- chi-announcements@acm.org

- cl-list@lists.ifi.uzh.ch

- community@sti2.org

- corpora@uib.no

- dbpedia-discussion@lists.sourceforge.net

- dbworld@cs.wisc.edu

- deri.ie-research@lists.deri.org

- derive-public@few.vu.nl

- diachron@googlegroups.com

- dl@dl.kr.org

- eccaisocieties08@eccai.org

- elsnet-list@elsnet.org

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[9]http://www.wikicfp.com/cfp/
[10]https://easychair.org/cfp/

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- emplus@dfki.de

- event@in.tu-clausthal.de

- fca-list@cs.uni-kassel.de

- flarenet_/subscribers@ilc.cnr.it

- grin-eventi@grin-informatica.it

- icaps-conference@googlegroups.com

- ines-grupo-web@lists.morfeo-project.org

- info-ic@listes.irisa.fr

- ir-l@uccvma.ucop.edu

- irma-l@irma-international.org

- isb@listserv.it.northwestern.edu

- kaw@science.uva.nl

- lirmm@lirmm.fr

- liste-egc@polytech.univ-nantes.fr

- ln@cines.fr

- machine-learning@egroups.com

- members@sigsem.org

- members@sti2.org

- nl-kr@tubvm.cs.tu-berlin.de

- ontolog-forum@ontolog.cim3.net

- open-linguistics@lists.okfn.org

- open-science@lists.okfn.org

- owlapi-developer@lists.sourceforge.net

- planet@lists.uni-ulm.de

- planning-list@googlegroups.com

- pragmaticweb@lists.spline.inf.fu-berlin.de

- project-lamapun@jacobs-university.de

- project-mathweb@jacobs-university.de

- protege-discussion@lists.stanford.edu

- protege-owl@mailman.stanford.edu

- public-lod@w3.org

- public-ontolex@w3.org

- public-rdfa@w3.org

- public-rww@w3.org

- public-semweb-lifesci@w3.org

- public-sparql-dev@w3.org

- public-vocabs@w3.org

- public-xg-ssn@w3.org

- qald-1@lists.cit-ec.uni-bielefeld.de

- redlinkeddata@listas.fi.upm.es

- researchers@pascal-network.org

- rwi@future-internet.eu

- sap.research.smartproducts@listserv.sap.com

- semantic-web@w3.org

- semanticweb@yahoogroups.com

- semweb-spain@delicias.dia.fi.upm.es

- sigsem@aclweb.org

- igsem@list.rug.nl

- siksleden@cs.uu.nl

- sioc-dev@googlegroups.com

- sw-meetings@cs.vu.nl

- tag@cs.texas.edu

- topicmapmail@infoloom.com

- twebbo@cs.unibo.it

- web-semantica-ayuda@es.tldp.org

- web.semantique@inria.fr

- webscience-announce@ecs.soton.ac.uk

- webscience-montpellier-list@meetup.com

- wegov@ecs.soton.ac.uk

- wikidata-l@lists.wikimedia.org

- www-rdf-interest@w3.org

- xml-dev@lists.xml.org

- linking-open-data@simile.mit.edu

- jdkim@dbcls.rois.ac.jp

- wdaqua-all@lists.iai.uni-bonn.de

- qaig@googlegroups.com

- semantic-web@w3.org

- herzig@searchhaus.net

- aksw@informatik.uni-leipzig.de

- eetn@iit.demokritos.gr

Moreover the Call For Papers for each of the three HOBBIT challenges has been sent via email to the following lists which consist of emails of individual persons:

1. the HOBBIT community list containing 116 subscribers. This list contains emails of people from all the organizations and universities participating in the HOBBIT consortium.

2. the HOBBIT contact list which contains 182 members. This list consists of emails of members who expressed their interest and subscribed into the HOBBIT project and are not members of the HOBBIT consortium.

Program & Accepted Papers

Challenge Session Tuesday, May 30th, 2017 14:30 – 15:00	
14:30 – 14:40	**MOCHA Challenge Overview** Michael Röder
14:40 – 14:50	Alexander Potocki, Daniel Hladky and Martin Voigt, **Challenge Accepted: QUAD Meets MOCHA2017**
14:50 – 15:00	Mirko Spasić and Milos Jovanovik, **MOCHA 2017 as a Challenge for Virtuoso**

Posters and Demos Session June 1st, 2017 9:00 – 11:00
The **QUAD system** will be presented as poster

Figure 1: MOCHA workshop schedule at ESWC 2017.

Program & Accepted Papers

Challenge Session Tuesday, May 30th, 2017 15:00 – 15:30	
15:00 – 15:10	**OKE Challenge Overview** Michael Röder
15:10 – 15:20	Julien Plu, Raphaël Troncy and Giuseppe Rizzo, **ADEL@OKE2017: A Generic Method for Indexing Knowlege Bases for Entity Linking**
15:20 – 15:30	Raabia Asif and Muhammad Abdul Qadir, **"HmaraNER": A Named Entity Recognizer and Linker**

Posters and Demos Session June 1st, 2017 9:00 – 11:00
The **ADEL system** will be presented as poster

Figure 2: OKE workshop schedule at ESWC 2017.

3. the MOCHA, OKE, and QALD challenges mailing lists: these lists comprise emails of persons who expressed their interest for MOCHA, OKE and QALD challenges, respectively, through the following googlegroup mailing lists:

   - mightystoragechallenge-contact@googlegroups.com
   - OKE-contact@googlegroups.com
   - qald-contact@googlegroups.com

4. the authors' list comprising 1027 authors who participated in previous editions of the OKE and QALD challenges. Moreover this list contains email addresses of authors participating in renowned semantic web conferences, such as the ESWC and the ISWC.

Moreover, the Call For Papers for each challenge was sent to the subscribed participants of the BioASQ project[11], as well as tweeted through the HOBBIT Twitter account.

For MOCHA we received 2 paper/system submissions, for OKE 3 submissions and for QALD 3 submissions. Only 1 paper/system, out of the 8 across the three challenges, which was submitted to the OKE challenge was rejected. All the papers describing the challenge systems were peer-reviewed by experts. For each submission we ensured that we had at least two reviews. The proceedings of the three HOBBIT ESWC 2017 challenges were published by Springer on the volume *Dragoni M., Solanki M. and Blomqvist E. (eds), Semantic Web Challenges, Communications in Computer and Information Science, vol. 769, 2017*[12] (details on the proceedings can be found in D7.1.1 – First Workshop Proceedings).

The schedule for the common HOBBIT workshop session of MOCHA, OKE and QALD challenges at ESWC 2017 can be seen in Figures 1, 2 and 3 respectively. In specific, the sub-session for MOCHA

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[11] http://participants-area.bioasq.org/
[12] https://doi.org/10.1007/978-3-319-69146-6

Program & Accepted Papers

Challenge Session Tuesday, May 30th, 2017 14:00 – 14:30	
14:00 – 14:10	**QALD Challenge Overview** Giulio Napolitano
14:10 – 14:17	Daniil Sorokin and Iryna Gurevych, **End-to-End Representation Learning for Question Answering with Weak Supervision**
14:17 – 14:24	Dennis Diefenbach, Kamal Singh and Pierre Maret, **WDAqua-core0: A Question Answering Component for the Research Community**
14:24 – 14:31	Nikolay Radoev, Mathieu Tremblay, Michel Gagnon and Amal Zouaq, **Answering Natural Language Questions on RDF Knowledge Base in French**

Posters and Demos Session June 1st, 2017 9:00 – 11:00
The following systems will be presented as posters: • Daniil Sorokin and Iryna Gurevych, **End-to-End Representation Learning for Question Answering with Weak Supervision** • Nikolay Radoev, Mathieu Tremblay, Michel Gagnon and Amal Zouaq, **Answering Natural Language Questions on RDF Knowledge Base in French**

Figure 3: QALD workshop schedule at ESWC 2017.

challenge consisted of 2 oral presentations as well as of the MOCHA overview presentation. Furthermore, one paper has been also presented as poster within the Posters and Demo session at ESWC 2017. The schedule and the accepted papers for MOCHA session at ESWC 2017 can be also found at the HOBBIT website[13]. The OKE sub-session consisted of 1 presentation[14] and the OKE challenge overview presentation. The schedule of the OKE session at ESWC 2017 as well as the list with the accepted papers can be found at the HOBBIT website[15]. The QALD sub-session consisted of 3 presentations and the QALD overview presentation. Furthermore, two papers submitted to QALD have been also presented as posters within the Posters and Demo session at ESWC 2017. The schedule of the QALD sub-session at ESWC 2017 and the accepted papers can be found at the HOBBIT website[16].

The workshop was evaluated by the people who attended the session using a questionnaire that was distributed to them at the end of the session. The questionnaire and the responses of the attendees

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[13] https://project-hobbit.eu/challenges/mighty-storage-challenge/
[14] One of the two accepted systems withdrew just days before ESWC 2017.
[15] https://project-hobbit.eu/challenges/oke2017-challenge-eswc-2017/
[16] https://project-hobbit.eu/challenges/qald2017/

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can be found in D7.4.1 – First Challenge Evaluation.

2.2   DEBS Grand Challenge Session Organization at DEBS 2017

The DEBS Grand Challenge (DEBS GC) 2017 session was co-organized by HOBBIT and was held within the context of the 11th ACM International Conference on Distributed and Event-Based Systems (DEBS 2017) in June 2017. The Call For Papers for DEBS Grand Challenge can be found in Appendix A and on the HOBBIT project website[17]. The CFP for DEBS Grand Challenge has been published on WikiCFP[18] and distributed to the Semantic Web mailing list[19]. Furthermore, the DEBS GC 2017 CFP has been disseminated to the DEBS GC mailing list[20] and to the DBWorld mailing list[21]. It was also communicated through the channels and social media of DEBS 2017[22] and tweeted through the HOBBIT Twitter account.

DEBS GC originally received 14 systems submissions, 7 out of which managed to pass the preliminary evaluation round. Each system that went through the preliminary round was accompanied by a paper describing the system. Therefore for DEBS GC 2017, 7 papers have been accepted plus the overview DEBS GC paper submitted by the organizers of the challenge.

All the 8 aforementioned DEBS Grand Challenge papers have been published by ACM as part of the DEBS 2017 conference proceedings volume, *DEBS '17: Proceedings of the 11th ACM International Conference on Distributed and Event-based Systems, ACM, New York, NY, USA, 2017*[23] (details on the proceedings can be found in D7.1.1 – First Workshop Proceedings).

The schedule and the list with the accepted papers/systems for DEBS GC session can be seen in Figure 4 and can be also found on the HOBBIT website[24]. In specific, the DEBS GC session consisted of 7 oral presentations as well as of the DEBS GC overview presentation.

The workshop was evaluated by the people who attended the session using a questionnaire that was distributed to them at the end of the session. The questionnaire and the responses of the attendees can be found in D7.4.1 – First Challenge Evaluation.

2.3   ISWC 2017 OM Workshop – HOBBIT Link Discovery Task

HOBBIT contributed the Link Discovery Task[25] at the Ontology Matching (OM)[26] workshop at ISWC 2017. The OM workshop conducted an extensive and rigorous evaluation of ontology matching and instance matching (link discovery) approaches through the OAEI (Ontology Alignment Evaluation Initiative)[27] 2017 campaign. Results of the HOBBIT Link Discovery Task have been presented within the context of the OM workshop of ISWC 2017 in October 2017.

HOBBIT was not responsible for the organization of the OM workshop but only for the workshop's part which pertained to the HOBBIT Link Discovery Task. Therefore, within the context of the current

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[17]https://project-hobbit.eu/challenges/debs-grand-challenge/
[18]http://www.wikicfp.com/cfp/
[19]semantic-web@w3.org
[20]gc@debs.org
[21]https://research.cs.wisc.edu/dbworld/post.html
[22]https://conf.researchr.org/home/debs-2017
[23]https://dl.acm.org/citation.cfm?id=3093742
[24]https://project-hobbit.eu/challenges/debs-grand-challenge/
[25]https://project-hobbit.eu/challenges/om2017/
[26]http://om2017.ontologymatching.org/#prg
[27]http://oaei.ontologymatching.org/2017/

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Program & Accepted Papers

Grand Challenge Session Thursday, June 22nd, 2017 15:50—17:30	
15:50 – 16:00	**The DEBS 2017 Grand Challenge,** Vincenzo Gulisano, Zbigniew Jerzak, Roman Katerinenko, Martin Strohbach, Holger Ziekow,
16:00 – 16:10	Nicolo Rivetti, Yann Busnel and Avigdor Gal, **FlinkMan – Anomaly Detection in Manufacturing Equipment with Apache Flink.**
16:10 – 16:20	Nihla Akram, Sachini Siriwardene, Malith Jayasinghe, Miyuru Dayarathna, Isuru Perera, Seshika Fernando, Srinath Perera, Upul Bandara and Sriskandarajah Suhothayan, **Anomaly Detection of Manufacturing Equipment via High Performance RDF Data Stream Processing.**
16:20 – 16:30	Ciprian Amariei, Paul Diac and Emanuel Onica, **Optimized Stage Processing for Anomaly Detection on Numerical Data Streams.**
16:30 – 16:40	Dimitrije Jankov, Sourav Sikdar, Rohan Mukherjee, Kia Teymourian and Chris Jermaine, **Real-time High Performance Anomaly Detection over Data Streams.**
16:40 – 17:00	Coffee Break
17:00 – 17:10	Christian Mayer, Ruben Mayer and Majd Abdo, **StreamLearner — Distributed Incremental Machine Learning on Event Streams.**
17:10 – 17:20	Joong-Hyun Choi, Kang-Woo Lee, Hyungken Jung and Eun-Sun Cho, **Runtime Anomaly Detection Method in Smart Factories using Machine Learning on RDF Event Streams.**
17:20 – 17:30	Tarek Zaarour, Niki Pavlopoulou, Soulieman Hasan, Umair Ulhassan and Edward Curry, **Automatic Anomaly Detection over Ordering Sliding Windows.**

Figure 4: DEBS Grand Challenge session schedule at DEBS 2017.

report we will refer to the steps undertaken for the successful organization of the Link Discovery Task. Some steps concerning the general organization of the OM workshop will be reported for the sake of completeness.

The CFP of the OM workshop[28] through which the HOBBIT Link Discovery Task was also advertised can be found in Appendix A.

In HOBBIT Link Discovery Task four systems participated in total and two of them elected to publish (non-peer reviewed) results papers at the OM workshop [1, 2]. The remaining two systems had already been described in [3] and [4] (details on the proceedings can be found in D7.1.1 – First Workshop Proceedings). The overview of the systems' results participating in the Link Discovery Task can be found on the HOBBIT website[29].

The Link Discovery Task has been summarized in the oral overview presentation of the OAEI 2017 campaign within the context of the OM workshop. The schedule of the OM workshop can be found in Figure 5.

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[28] http://om2017.ontologymatching.org/#cfp
[29] https://project-hobbit.eu/challenges/om2017/

The part of the workshop concerning the Link Discovery Task was evaluated by the people who attended the session using a questionnaire that was distributed to them. The questionnaire and the responses of the attendees can be found in D7.4.1 – First Challenge Evaluation.

Figure 5: OM Workshop schedule at ISWC 2017.

3 Organization of Future Workshops

During the second year of the project, preparations for the challenges and the corresponding workshops that will run during 2018 have started. We are proud to report that HOBBIT got accepted to organize three challenges within the context of ESWC 2018. In particular HOBBIT will organize the MOCHA, OKE and SQA (Scalable Question Answering - an offspring of QALD), challenges at the ESWC 2018 conference. It will also contribute the Link Discovery task in the OAEI 2017.5 challenge which will run at ESWC 2018. HOBBIT will again be responsible for the DEBS Grand Challenge in 2018 and plans to run the Link Discovery task as part of the 2018 OAEI campaign at ISWC 2018. Finally, HOBBIT has already launched the MOCHA, OKE, SQA and StreaML open challenges[30]. In the open challenges participants can join at any time and winners will be announced at predefined, periodic cutoff dates. For MOCHA and OKE open challenges the first cutoff period, where winners will be proclaimed, is in February 2018 while for SQA and StreaML open challenges the first cutoff period is in May 2018.

3.1 Organization of ESWC 2018 Workshops

Regarding the organization of MOCHA, OKE and SQA challenges which will be held within the context of ESWC 2018 we are currently preparing the CFPs and all the necessary material which is going to be disseminated for the timely advertisement of all three ESWC 2018 challenges.

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[30]https://project-hobbit.eu/open-challenges/

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HOBBIT will also contribute the Link Discovery task in OAEI 2017.5 which will be organized within ESWC 2018. Preparations for the organization of the Link Discovery Task in OAEI 2017.5 have already been initiated.

3.2 Organization of ISWC 2018 Workshops

Furthermore, the HOBBIT project plans to organize the Link Discovery Task at ISWC 2018 as part of OAEI 2018. Preparation will start in due time (ISWC 2018 takes place in October 2018).

3.3 Organization of DEBS Grand Challenge 2018

The successful organization of the 2017 DEBS Grand Challenge by HOBBIT has led to the renewal of the collaboration between the DEBS conference and the HOBBIT project. As such, the HOBBIT platform will host the upcoming DEBS Grand Challenge 2018 which uses marine traffic data and focuses on providing predictions for vessels' destinations and arrival times. In fact, the challenge website[31] is fully operational and challenge participants can upload their solutions to the HOBBIT platform for benchmarking. The challenge has been advertised through the channels and social media of DEBS 2018.

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[31]https://project-hobbit.eu/challenges/debs2018-grand-challenge/

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Appendix A   Call for Papers

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C A L L   F O R   P A P E R S

MOCHA 2017 - Mighty Storage Challenge

May 28th to June 1st 2017, Portoroz, Slovenia

in conjunction with the 14th European Semantic Web Conference (ESWC 2017)
http://2017.eswc-conferences.org/
https://project-hobbit.eu/challenges/mighty-storage-challenge/
email: mightystoragechallenge-contact@googlegroups.com

The aim of this challenge is to test the performance of solutions for SPARQL processing
in aspects that are relevant for modern applications. These include ingesting data,
answering queries on large datasets, versioning data, browsing and serving as backend for
applications using Linked Data. The MOCHA challenge will test the systems against data derived from real
applications and with realistic loads.

This year, the challenge comprises the following tasks:
-Task 1 (Data Ingestion) will measure how well systems can ingest streams of RDF data.
-Task 2 (Data Storage) will measure how well data stores perform for different types of queries.
-Task 3 (Versioning) will measure how well versioning and archiving systems for Linked
        Data perform when they manage multiple versions of large data sets.
-Task 4 (Browsing) will check if existing solutions perform adequately for applications that address
browsing through large data sets.

Participants will be expected to describe their solution and results on the training datasets over a 5
page paper. In particular, a short summary of the approach chosen, a link to the experimental results
and an analysis of the strengths and weaknesses of the approach are expected.

Important Dates

Paper submission deadline (5 pages document): March 10th, 2017, 23:59 Hawaii Time*
Notification of acceptance: April 7th, 2017
Camera ready papers (5 pages document): April 23rd, 2017
Deadline for submission of system answers/instructions for evaluation: TBA
Release of evaluation results: TBA
Proclamation of winners: During ESWC 2017 closing ceremony

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*Eligible to submit papers are only authors participating in the challenge.

Organization

Axel-Cyrille Ngonga Ngomo, Institute for Applied Informatics, Germany
Irini Fundulaki, Foundation for Research and Technology – Hellas (FORTH), Greece
Mirko Spasic, OpenLink, UK
Henning Petzka, Fraunhofer IAIS, Germany
Vassiliki Rentoumi, NCSR "Demokritos", Greece

For the complete list of organizers and program committee members,
visit the challenge website.

Further Information and Contact

For detailed information, including datasets and submission guidelines,
please visit the challenge website:

https://project-hobbit.eu/challenges/mighty-storage-challenge/

Contact Email: mightystoragechallenge-contact@googlegroups.com

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C A L L F O R P A P E R S

OKE 2017 - Open Knowledge Extraction Challenge

https://project-hobbit.eu/challenges/oke2017-challenge-eswc-2017/

OKE-contact@googlegroups.com

May 28th to June 1st 2017, Portoroz, Slovenia

in conjunction with the 14th European Semantic Web Conference (ESWC 2017)

http://2017.eswc-conferences.org/

The aim of this challenge is to test the performance of knowledge extraction systems in

aspects that are relevant for the Semantic Web. These include precision, recall and

runtime. The challenge will test the systems against data derived from real datasets.

We herewith invite system developers to participate in the aforementioned tasks.

The system developers are invited to write papers (5 page documents) presenting their results on the training data

(see important dates below). To ensure that the system results are comparable, we will

provide the HOBBIT benchmarking platform for the generation of the final results to be

included into the system publications. A specification of the hardware on which the

benchmarks will be ran will be released in due course.

This year, the challenge comprises the following tasks:

-Task 1: Focused Named Entity Identification and Linking

-Task 2: Broader Named Entity Identification and Linking

-Task 3: Focused Musical Named Entity Recognition and Linking

-Task 4: Knowledge Extraction

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Important Dates

Paper submission deadline (5 pages document): March 10th, 2017, 23:59 Hawaii Time*

Notification of acceptance: April 7th, 2017

Camera ready papers (5 pages document): April 23rd, 2017

Deadline for submission of system answers/instructions for evaluation: TBA

Release of evaluation results: TBA

Proclamation of winners: During ESWC 2017 closing ceremony

*Eligible to submit papers are only authors participating in the challenge.

Organization

René Speck, University of Leipzig, Germany

Michael Röder, University of Leipzig, Germany

Ricardo Usbeck, University of Leipzig, Germany

Axel-Cyrille Ngonga Ngomo, Institute for Applied Informatics, Germany

Horacio Saggion, Universitat Pompeu Fabra, Spain

Luis Espinosa-Anke, Universitat Pompeu Fabra, Spain

Sergio Oramas, Universitat Pompeu Fabra, Spain

For the complete list of organizers and program committee members,

visit the challenge website.

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Further Information and Contact

For detailed information, including datasets and submission guidelines,

please visit the challenge website:

https://project-hobbit.eu/challenges/oke2017-challenge-eswc-2017/

Contact Email: OKE-contact@googlegroups.com

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QALD 2017 - 7th Question Answering over Linked Data Challenge

https://project-hobbit.eu/challenges/qald2017/
qald-contact@googlegroups.com

May 28th to June 1st 2017, Portoroz, Slovenia

in conjunction with the 14th European Semantic Web Conference (ESWC 2017)
http://2017.eswc-conferences.org/

The key challenge for Question Answering over Linked Data is to translate a user's
information need into a form such that it can be evaluated using standard
Semantic Web query processing and inferencing techniques.

The main task of QALD therefore is the following:
Given one or several RDF dataset(s) as well as additional knowledge sources and natural
language questions or keywords, return the correct answers or a SPARQL query that
retrieves these answers.

This year, the challenge comprises the following tasks:
-Task 1: Multilingual question answering over DBpedia
-Task 2: Hybrid question answering
-Task 3: Large-Scale Question answering over RDF
-Task 4: English question answering over Wikidata

We expect participants to describe their approach over a 5 page paper, including advantages and
disadvantages as well as a first evaluation of the system with the respective task training data or an
in-depth analysis of errors.

Important Dates

Paper submission deadline (5 pages document): March 10th, 2017, 23:59 Hawaii Time*
Notification of acceptance: April 7th, 2017
Camera ready papers (5 pages document): April 23rd, 2017
Deadline for submission of system answers/instructions for evaluation: TBA
Release of evaluation results: TBA
Proclamation of winners: During ESWC 2017 closing ceremony

- Eligible to submit papers are only authors participating in the challenge.

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Organization

Ricardo Usbeck, University of Leipzig, Germany
Axel-Cyrille Ngonga Ngomo, Institute for Applied Informatics, Germany
Bastian Haarmann, Fraunhofer-Institute IAIS, Germany
Anastasia Krithara, NCSR "Demokritos", Greece

For the complete list of organizers and program committee members,
please visit the challenge website.

Further Information and Contact

For detailed information, including datasets and submission guidelines,
please visit the challenge website:

https://project-hobbit.eu/challenges/qald2017/

Contact Email: qald-contact@googlegroups.com

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Call for Papers: GRAND CHALLENGE – DEBS 2017
June 19 - 23, Barcelona Spain

The 2017 ACM DEBS Grand Challenge
(https://project-hobbit.eu/challenges/debs-grand-challenge/) is the seventh in a series of challenges which seek to provide a common ground and uniform evaluation criteria for a competition aimed at both research and industrial event-based systems. The focus of the DEBS 2017 Grand Challenge is on the analysis of RDF streaming data generated by digital and analogue sensors embedded within manufacturing equipment.

This year's Grand Challenge is co-organized by the HOBBIT project represented by AGT International within the 11th ACM International Conference on Distributed and Event-Based Systems (DEBS 2017, http://www.debs2017.org/). Both the data set and the automated evaluation platform are provided by the HOBBIT project.

Challenge Description

The 2017 DEBS Grand Challenge focuses on two scenarios that relate to the problem of automatic detection of anomalies for manufacturing equipment. The overall goal of both scenarios is to detect abnormal behavior of a manufacturing machine based on the observation of the stream of measurements provided by such a machine. Check more about our RDF steaming here https://docs.google.com/document/d/1O8TXLcqDHAPMmxZ8siYHLBVc6sfqslkVQKywNNILcy4/edit?usp=sharing . The data produced by each sensor is clustered and the state transitions between the observed clusters are modeled as a Markov chain. Based on this classification, anomalies are detected as sequences of transitions that happen with a probability lower than a given threshold. The difference between the first and the second scenario is that in the first scenario the number of machines to observe is fixed, while in the second scenarios new machines dynamically join and leave the set of observable machines. Read more details here: https://project-hobbit.eu/challenges/debs-grand-challenge/

Prize

Participants in the 2017 DEBS Grand Challenge will have the chance to win two prizes. The first prize is the "Grand Challenge Award" for the best performing, correct submission. The second prize is the "Grand Challenge Audience Award" – it is determined based on the audience feedback provided after the presentation of the Grand Challenge solutions during the DEBS 2017 conference.

Registration and Submission

Submission and registration procedure is documented here:
https://github.com/hobbit-project/platform/wiki
The evaluation platform can be reached under following address:
http://master.project-hobbit.eu:8080

Important Dates

April 7th, 2017: GC solutions due (submission system closes)
April 29th, 2017: Paper submission due
March 17th, 2017: Evaluation platform supports distributed performance tests
March 3rd, 2017: Evaluation platform supports single node performance tests
February 17th, 2017: Evaluation platform supports correctness tests
December 17th, 2016: Evaluation platform online (team registration open)
December 1st, 2016: Problem description (incl. sample data) online

Organizers

Vincenzo Gulisano – Chalmers University of Technology
Roman Katerinenko – AGT Group GmbH
Zbigniew Jerzak – SAP SE
Martin Strohbach – AGT Group GmbH
Holger Ziekow – Hochschule Furtwangen

OM-2017 Call for Papers

Audience:

The workshop encourages participation from academia, industry and user institutions with the emphasis on theoretical and practical aspects of ontology matching. On the one side, we expect representatives from industry and user organizations to present business cases and their requirements for ontology matching. On the other side, we expect academic participants to present their approaches vis-a-vis those requirements. The workshop provides an informal setting for researchers and practitioners from different related initiatives to meet and benefit from each other's work and requirements.

This year, in sync with the main conference, we encourage submissions specifically devoted to: (i) datasets, benchmarks and replication studies, services, software, methodologies, protocols and measures (not necessarily related to OAEI), and (ii) application of the matching technology in real-life scenarios and assessment of its usefulness to the final users.

Topics of interest include but are not limited to:

- Business and use cases for matching (e.g., big and open data);
- Requirements to matching from specific application scenarios (e.g., energy, public sector);
- Application of matching techniques in real-world scenarios (e.g., with mobile apps);
- Formal foundations and frameworks for matching;
- Matching and big data;
- Matching and linked data;
- Instance matching, data interlinking and relations between them;
- Process model matching;
- Large-scale and efficient matching techniques;
- Matcher selection, combination and tuning;
- User involvement (including both technical and organizational aspects);
- Explanations in matching;
- Social and collaborative matching;
- Uncertainty in matching;
- Reasoning with alignments;
- Alignment coherence and debugging;
- Alignment management;
- Matching for traditional applications (e.g., information integration);
- Matching for emerging applications (e.g., search, web-services).

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References

[1] Maximilian Mackeprang Abderrahmane Khiat. I-Match and OntoIdea Results for OAEI 2017. http://www.dit.unitn.it/~pavel/om2017/papers/oaei17_paper4.pdf, 2017.

[2] Vivek Shivaprabhu Isabela Mott Catia Pesquita Francisco Couto Isabel Cruz Daniel Faria, Booma S. Balasubramani. Results of AML in OAEI 2017. http://www.dit.unitn.it/~pavel/om2017/papers/oaei17_paper2.pdf, 2017.

[3] Mohamed Ahmed Sherif, Kevin Dreßler, Panayiotis Smeros, and Axel-Cyrille Ngonga Ngomo. Radon-rapid discovery of topological relations. In *AAAI*, pages 175–181, 2017.

[4] Panayiotis Smeros and Manolis Koubarakis. Discovering spatial and temporal links among rdf data. In *LDOW@ WWW*, 2016.

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