



# HOBBIT

Newsletter  
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**HOBBIT**  
Holistic Benchmarking of  
Big Linked Data

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Dear Hobbit friends and Community members,

HOBBIT organizes, joins and promotes challenges that aim to measure the performance of technologies for the different steps of the Big Linked Data (BLD) lifecycle. In contrast to existing benchmarks, we provide modular and easily extensible benchmarks for all industry-relevant BLD processing steps that allow to assess whole suites of software that cover more than one step. The infrastructure necessary to run the evaluation campaigns is made available. Our architecture relies on web interfaces and cloud infrastructures to ensure scalability. We are proud to announce you that HOBBIT is sponsoring the following challenges:

- [Mighty Storage Challenge at ESWC 2017.](#)
- [Question Answering over Linked Data \(QALD-7\) Challenge at ESWC 2017.](#)
- [Open Knowledge Extraction \(OKE\) Challenge at ESWC 2017.](#)
- [2017 ACM DEBS Grand Challenge at DEBS 2017.](#)

Follow the links above to learn more details. Read the prerequisites for participation and take part.

Finally, we are proud to inform you that HOBBIT is conducting a tutorial and a workshop within [ESWC 2017](#):

- [Workshop on Querying the Web of Data \(QuWeDa 2017\).](#) The constant growth of Linked Open Data (LOD) on the Web opens new challenges pertaining to querying such massive amounts of publicly available data. LOD datasets are available through various interfaces, such as data dumps, SPARQL endpoints and triple pattern fragments. In addition, various sources produce streaming data. Efficiently querying these sources is of central importance for the scalability of Linked Data and Semantic Web technologies. The trend of publicly available and interconnected data is shifting the focus of Web technologies towards new paradigms of Linked Data querying. To exploit the massive amount of LOD data to its full potential, users should be able to query and combine this data easily and effectively. This workshop at the Extended Semantic Web Conference (ESWC) seeks original articles describing theoretical and practical methods and techniques for fostering, querying, and consuming the Data Web.
- [Tutorial on Link Discovery – Algorithms, Approaches and Benchmarks.](#) *By: Axel-Cyrille Ngonga Ngomo, Irini Fundulaki and Mohamed Ahmed Sherif.* Link Discovery is a task of central importance when creating Linked Datasets. Two challenges need to be addressed when carrying out link discovery: The quadratic a-priori runtime complexity of this task demands the development of time-efficient approaches for linking large datasets. Second, the need for accuracy demands the development of generic approaches that can





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detect correct and complete sets of links. Third, the development of benchmarks that test the ability of instance matching techniques and tools is crucial for identifying and addressing the technical difficulties and challenges in this domain. In this tutorial, we aim to help the audience when faced with all three challenges. First, we will provide an overview of existing solutions for link discovery. Then, we will look into some of the state-of-art algorithms for the rapid execution of link discovery tasks. In particular, we will focus on algorithms which guarantee result completeness. Then, we will present algorithms for the detection of complete and correct sets of links. Here, our focus will be on supervised, active and unsupervised machine learning algorithms. Last, we will discuss existing instance matching benchmarks for Linked Data and We will conclude the tutorial by providing hands-on experience with one of the most commonly used link discovery frameworks, [Limes](#).

Join our community to remain informed at [project-hobbit.eu/get-involved](http://project-hobbit.eu/get-involved). If you have any questions, do not hesitate to contact us as explained at [project-hobbit.eu/contacts](http://project-hobbit.eu/contacts). We are looking forward to benchmarking your system soon. Stay tuned!

Best,  
HOBBIT team.



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