

## PRESS INFORMATION

### **New graph search engine introduced**

### **Search, find and further process Linked Data with GraphScope: “Linked Data” for companies**

**Karlsruhe, December 2, 2015. Since the discussion around Industry 4.0 and Big Data, it is no longer a secret that data increases in value through enrichment and linkage. Nevertheless, even database search engines only provide a list of individual search results so far and do not use relationships in the data. With GraphScope the SearchHaus GmbH from Karlsruhe has now developed a graph search engine for the so-called “Linked Data” which recognizes the relationships in the data and thereby enables fast querying with simple keywords on structured data, without requiring technical knowledge of the user.**

Oftentimes, search activities have to be performed in companies in order to get information. This is either done elaborately in several different databases, some times requiring queries written in SQL, or knowledge of the query language SPARQL is necessary in case there is already a knowledge graph linking the available data. Both approaches require IT knowledge and time. Here, the principle of “linked data“ comes into play, which can already refer to numerous standardizations through the W3C.

#### **GraphScope: Find Linked Data without any IT knowledge**

In order to speed up the search process and also enable it without technological knowledge, the SearchHaus GmbH in Karlsruhe developed the graph search engine GraphScope. GraphScope is based on the principle of Linked Data and also uses knowledge graphs, but is operated in the same way as well-known search engines.

#### **Application example: Search in the Wikipedia Knowledge Graph**

Keyword searches can be easily entered into a central search mask that are then interpreted by GraphScope. In the following, the system provides a table that contains the relevant data from the knowledge graph. A demo in which one can search through the English Wikipedia Knowledge Graph is provided on the website <https://graphscoope.io>. For example, when searching for “stadium soccer clubs bundesliga“, the user receives a table of all stadiums of the soccer clubs playing in the Bundesliga and visualizations of the connections between the individual objects. Additionally, GraphScope directly provides details on the clubs, stadiums, players, and much more from the data of the connected system with just a few clicks. Furthermore, the results can be exported as a file.

#### **Cross-Industry Use**

GraphScope is domain-independent and can be used on diverse data. The pharmaceutical industry, for example, profits from a facilitated search for substances in medications and their side effects. Production data in the automotive industry can also be searched through in order to find out which parts of a supplier X were used in a model Z. Furthermore, many other application scenarios in numerous other industries are possible.

GraphScope can easily be integrated as SaaS service or as an independent search server in the existing IT infrastructure and connected to, for example, existing relational databases like MySQL, Oracle and PostgreSQL, or to RDF-triple stores that can then easily and quickly be searched through with GraphScope.

People who are interested can find further information on GraphScope and the demo of the search in the English Wikipedia Knowledge Graph online at <https://graphsco.pe.io>.

**About the SearchHaus GmbH:**

In 2014, the SearchHaus GmbH was founded by Dr. Daniel Herzig and Dr. Günter Ladwig in Karlsruhe. With GraphScope, SearchHaus offers a smart data engine that enables companies from different industries, for example pharmaceutical industry, biochemistry, agricultural sciences, automotive, and manufacturing, faster querying for research and development. The applied technology is based on years of research at the Institute of Applied Informatics and Formal Description Methods (AIFB) of the Karlsruhe Institute of Technology (KIT).

SearchHaus was awarded with the “Best of IT Innovation Award“ in the category “Knowledge Management“ in 2014 and is funded by the program “Junge Innovatoren“ of the state of Baden-Wuerttemberg. Due to its promising technology, the company was additionally included in the programs “SAP Startup Focus“ as well as “IBM Global Entrepreneur“.

<https://graphsco.pe.io>  
[www.searchhaus.net](http://www.searchhaus.net)

**Company contact:**

SearchHaus GmbH  
Dr. Daniel Herzig  
Alter Schlachthof 39  
76131 Karlsruhe  
+49 (721) 609 543 15  
E-Mail: [contact@searchhaus.net](mailto:contact@searchhaus.net)  
[www.searchhaus.net](http://www.searchhaus.net)

**Press contact:**

saalto Agentur und Redaktion GmbH  
Konstanze Kulus  
Spitalstrasse 23a  
76227 Karlsruhe  
Telephone: +49 (0)721/160 88-78  
Email: [konstanze@saalto.de](mailto:konstanze@saalto.de)  
[www.saalto.de](http://www.saalto.de)