

Italian company provides products and services for integrating data from multiple heterogeneous sources into a cleanly structured, and always up-to-date Virtual Knowledge Graph. The VKG helps companies make better business decisions based on data insights

Summary

Profile type	Company's country	POD reference
Technology offer	Italy	TOIT20220712008
Profile status	Type of partnership	Targeted countries
PUBLISHED	Investment agreement Commercial agreement with technical assistance Research and development cooperation agreement	• World
Contact Person	Term of validity	Last update
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General Information

Short summary

The company provides products and services for integrating data from multiple heterogeneous sources into a cleanly structured, and always up-to-date Virtual Knowledge Graph. It serves applications like business intelligence, reporting, dashboarding, analytics, machine learning, and other scenarios where easily exploring and understanding data can provide real business value. The technology developed by the company is highly interoperable with third-party vendors (W3C recommendations compliant)

Full description

Successful businesses know that data is the key to making better business decisions and succeed. However, searching for data and ensuring its quality is enormously time-consuming for companies. For example, studies show that in the oil&gas sector, engineers spend 30–70% of their time searching and integrating data derived from heterogeneous sources (Crompton, 2008).

The Italian company has developed an efficient solution to the problem of data integration (without needing a copy of the data), empowering organisations to understand and make profitable use of data. They do this by virtually combining data from different sources into an always up-to-date knowledge graph, which is easy to explore and allows for new insights and better business decisions. The company helps other businesses to get data from different sources without effort, to explore it, and to make better business decisions on always fresh data. It serves

applications like business intelligence, reporting, dashboarding, analytics, machine learning, and any other scenario where easily exploring and understanding data can provide real business value. The technology developed by the company is highly interoperable with third-party vendors as it follows the relevant industry recommendations as specified, e.g., by the W3C.

What they offer:

- Services:

Consulting for big data integration projects, specialized in VKG (Virtual Knowledge Graphs): they provide expertise in solving complex and delicate situations regarding data integration (without needing a copy of the data) for medium to large multinational organizations in different industries. They provide extensive know-how in working with open source data integration softwares and are also main contributors to Ontop.

- Product:

Ontopic Studio is a user-friendly mapping editor, which turns relational Data into a Knowledge Graph with no-code. Using and strictly complying with open standards, Ontopic Studio's core engine combines top-level research with best practices to help you design large high-quality mappings productively. The developed solution makes data integration faster and easier. It doesn't require any knowledge of programming languages. The carefully designed user interface guides the user through the main tasks of data integration and can be proficiently used even without any knowledge of programming or SQL. The virtual approach doesn't require changing the current setup of the data sources. So the client can use its existing data and just add the virtual layer on top. Tehirsolution allows the client to increase the size of actual projects and to continuously build up on them sustainably in the future. It enables organizations to implement a FAIR data approach.

Some features of Ontopic Studio:

- It has a slick and intuitive user interface.
- It supports the main database systems and database federators such as Dremio, Denodo or Teiid as data sources.
- It can import existing Ontologies or create new ontologies.
- It allows users to visualize and apply simple transformation of the data through virtual views defined outside/above the data sources, without the need to touch the real data.
- The mapping can be incrementally adapted and extended.
- Easy navigation between mapping entries and filtering by ontology classes and properties.
- The users can recognize which data has already been mapped and which data has to be still mapped.
- Multiple users can work simultaneously on the same project.
- It provides a git repository for the export of data (mappings, ontologies, views) that can also be used as a back-up for re-importing the project in the current state.
- It is interoperable with other BI systems in the market, like PowerBI and Tableau
- It enables exporting of the mapping in R2RML and ontology in the OWL2QL standard.

The company has a solid background in working with national and international customers of different sizes, from small consultancy firms to global corporations.

Advantages and innovations

About their services:

We offer extensive know-how in data integration and data management based on a long experience in data integration projects. The company also has an excellent track record as a research partner in national and international projects in the area of data integration and data management, together with partners from industry, academia and consulting. We work in strict compliance with leading industry standards.

About their products:

- No-nonsense interface: The user interface focuses fully on virtual data integration allowing the user to concentrate on data and data models.
 - Extensible and flexible: Existing standard models, expressed in W3C standards can be used and extended, while new, ad-hoc models can also be easily created. Data models and their mapping to the data adapt easily to a changing data landscape and to new use cases. The seamless integration of all parts allows for distraction-free work on modeling and mapping, having a constant view on the actual data. The integrated, Git-based, version control system maximizes data safety and prevents loss of work.
 - No coding: The user interface was designed by professional UI designers on the requirements of experienced field experts. The result is a highly functional UI through which all standard operations can be performed without coding skills, neither in SQL nor in any other programming language. Advanced users can insert hand-edited transformations, where needed.
 - Open source: The core engine is the leading open source software for Virtual Knowledge Graphs and the company is among the main contributors. This engine combines top-level research with industry best practices.
 - Integrates with other products:
- Their product can be used as a whole or for specific data integration tasks, being a great environment for generating data models in the OWL2QL standard, a unique editing environment for R2RML mappings, a powerful materialization engine for data and for many other specific tasks.

Stage of development

Already on the market

IPR Status

IPR granted

Sustainable Development goals

- **Goal 9: Industry, Innovation and Infrastructure**

Partner Sought

Expected role of the partner

The Italian company is looking for partners (businesses, industry) interested in their technology for integrating heterogeneous and low-quality data into a cleanly structured, and always up-to-date Knowledge Graph and take better business decisions.

They are looking for partners for:

- Developing vertical applications based on Virtual Knowledge Graphs (preferred verticals in banking and finance, Industry 4.0, and pharmaceuticals).
- Complementing the application stack that fully exploits the potential of VKG, with a particular focus on data exploration and analysis.

Type of partnership

Type and size of the partner

Investment agreement

Commercial agreement with technical assistance

Research and development cooperation agreement

- Other
- SME 11-49
- SME 50 - 249
- University
- Big company
- R&D Institution
- SME <=10

Dissemination

Technology keywords

- **01003008 - Data Processing / Data Interchange, Middleware**
- **01003006 - Computer Software**

Targeted countries

- **World**

Market keywords

- **02006004 - Data processing, analysis and input services**
- **02006005 - Big data management**

Sector groups involved

- **ICT Industry and Services**

Media

Images



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