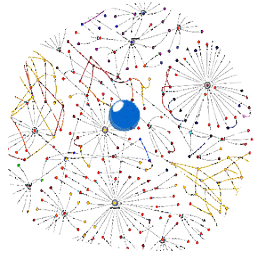




KGA

KNOWLEDGE GRAPH ALLIANCE



Introduction to **KGA**

ISO TC 184 87th plenary meeting
INDUSTRY DAY – Stavanger | Norway

2024-10-23
Jean-Charles LECLERC
TotalEnergies



**Standard
Norge**

Introducing the Knowledge Graph Alliance – KGA

1. Origin and Establishment
2. Why KGA?
3. What is KGA?
4. Activities in KGA
5. About SousLeSens
6. Becoming a Member or a Gold Founding Organization ?



KGA: Origin and Establishing

Created by six founders

- Launched after the end of the OntoCommons project, which focused on creating a common framework for ontology-driven data management

Inaugural event on November 10, 2023 in Brussels.

- Peter DRÖLL, DG Research, Innovation and Prosperity, European Commission: *“80% of industrial data goes unused. Can KGA unlock this potential?”*
- Industrial Session, with presentations from IKEA, TotalEnergies, SousLeSens, Michelin, Airbus, POSC Caesar Association

CEO transition per September 1, 2024:

- Hedi KARRAY has joined the European Commission
- Frédéric VERHELST (TotalEnergies) takes over as part-time CEO.



Why Knowledge Graph Alliance? (1)

Collaborative Innovation:

- Unites industry, academia, and standardization bodies.
- Drives advancements in AI, knowledge graphs, and ontologies.

Addressing Key Challenges:

- Enhances AI transparency and reliability.
- Tackles issues like AI hallucinations and data quality.

Cutting-Edge Research:

- Focus on hybrid solutions and cognitive twins.
- Integrates Semantic Knowledge Graphs with AI for better decision-making.

Why Knowledge Graph Alliance? (2)

Industry Impact:

- Partnerships with leading organizations (e.g., Airbus, Michelin, Bosch, TotalEnergies).
- Practical applications in diverse sectors like manufacturing, healthcare, and IoT.

Knowledge Sharing:

- Access to exclusive research and innovations.
- Participation in specialized working groups and summits.

Cutting-Edge Future-Ready Solutions:

- Developing frameworks for Explainable AI and Technical AI.
- Promoting interoperability and data-driven decision-making.

What is the Knowledge Graph Alliance?

Knowledge Sharing:

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Cutting-Edge Future-Ready Solutions:

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- Promoting interoperability and data-driven decision-making.

Collaborative Efforts:

- Workgroups focusing on SKGs for Machine Learning, Explainable AI, & SousLeSens platform.
- Upcoming workgroup on Knowledge Graphs for Large Language Models (LLMs).

Social Value Generation:

- Prioritizing FAIRness policy of data, models, and services.
- Fostering collaboration and innovation through experience exchange groups.

Activities in Knowledge Graph Alliance (1)

Working Groups

- Knowledge Graphs for Machine Learning: Leveraging Semantic Knowledge Graphs to enhance machine learning models.
- Explainable AI Principles: Developing principles and frameworks to ensure AI systems are transparent and their decisions are understandable.
- SousLeSense Platform: Development and utilization of the SousLeSense tool, which combines large language models (LLMs) and semantic web technologies for innovative applications.
- More to come...

KG-AI Summit

- The KGA organized the First KG-AI Summit at Cranfield University (UK) in April 2024.
- Distinguished keynote speakers and experts in semantics and knowledge graph technology shared cutting-edge research and explored practical applications.
- This event marked a significant milestone in the KGA's journey, bringing together the brightest minds from industry and academia to advance the field of KGs and AI.

Activities in Knowledge Graph Alliance (2)

Continuous Experience Exchange

- The KGA is creating an arena for more continuous experience exchange.
- This platform would allow discussion of issues and use cases provided by industrial partners.
- Feedback and suggestions from both industrial and academic peers working with SKGs will foster collaboration and innovation.

KGA Services

- Training Courses: Offering specialized training on knowledge graphs, ontologies, and AI.
- SME Services: Providing consulting and expertise to organizations implementing knowledge graph solutions.
- Certifications: Recognizing professionals with expertise in semantic technologies and knowledge graphs.

Activities in Knowledge Graph Alliance (3)

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SousLeSens – Empowering SKGs in Industry

Challenges Addressed by SousLeSens:

- Existing tools lack comprehensive coverage of Semantic Knowledge Graph (SKG) processes in creation and visualization.
- Complexity and high costs associated with implementing and operating SKG tools.

SousLeSens Functionality:

- Homogeneous and Integrated: SousLeSens covers the entire SKG lifecycle, ensuring seamless integration across processes.
- Cost-Effective: Unlike other tools, SousLeSens provides robust functionality without excessive expenses.
- Comprehensive Features: SousLeSens offers all essential functionalities for SKG development and utilization.

SousLeSens – Empowering SKGs in Industry

KGA as Custodian:

- The Knowledge Graph Alliance (KGA) oversees SousLeSens development and utilization.
- KGA ensures continuous improvement and alignment with industry needs.

Open-Source License:

- MIT open-source license, promoting collaboration and widespread adoption.

Conclusion:

- SousLeSens empowers industries to harness the full potential of Semantic Knowledge Graphs, driving informed decision-making and business value.
- Join the KGA and explore SousLeSens for your organization's SKG journey!

Becoming a Gold Founding Organization?

Membership fee

- First year: Gold Founding Organizations pay €25,000.
- Following years: The fee is €20,000, subject to approval at the General Assembly.

Gold Founding Organisations



Your
company's
logo?

