timbr
SQL Knowledge Graph™

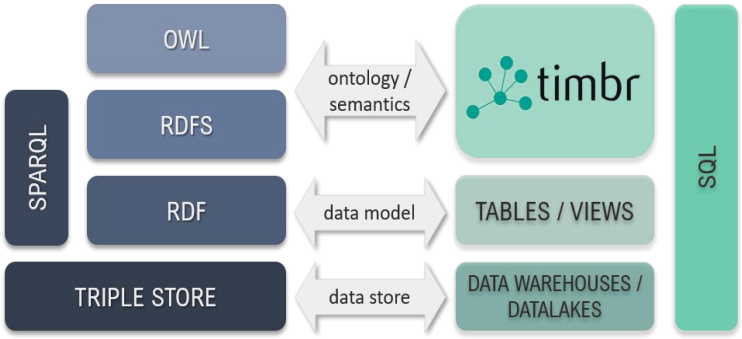
Knowledge Graphs in standard SQL mapped over any data base, accessible from any BI solution and in SQL, Apache Spark, Python and R

timbr – The SQL Knowledge Graph™, implements the Semantic Web principles **in standard SQL** as a virtual layer, working over standard cloud and on-premises infrastructure to **turn data lakes, relational and NoSQL databases into knowledge graphs**.

The platform provides data discovery, exploration, ontology modeling and semantic reasoning to enable data as connected, context-enriched concepts with inference and graph traversal capabilities while being queryable in SQL, Apache Spark, Python and R.

timbr lowers the entry bar of knowledge graphs. Any SQL-fluent user can learn to model, integrate and query data with timbr in a matter of days, so organizations reap benefits fast and at low implementation costs.

Semantic Web ontologies can be easily transformed by **timbr** into SQL ontologies, so enterprises can grow their current knowledge base to big data size on data lakes or data warehouses and enrich it with external data sources and ontologies such as DBpedia, GDELT, social media, news, weather and many others.



Semantic Web-timbr equivalence

With **timbr**, organizations can rapidly modernize legacy and current cloud or on-premise databases to virtually integrate data silos and facilitate complex analytics and machine learning without changing infrastructure or moving data.

Other advantages:

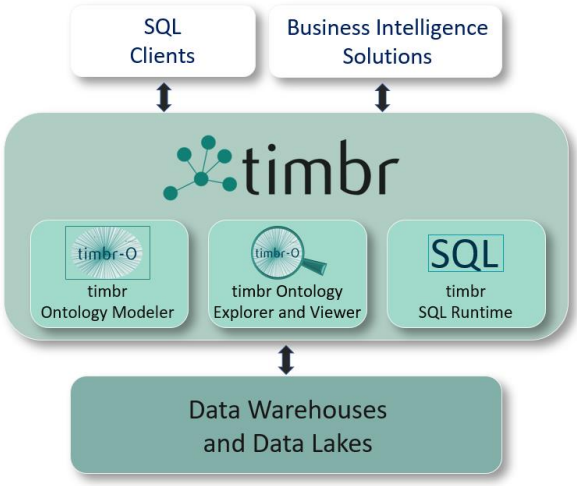
- No need to add backend data stores
- No need to learn new languages
- No ETL operations
- No retraining of IT personnel

Made for Big Data, Data Lakes and Data Warehouses

timbr works natively on Apache Spark and directly connects with the popular big data engines, providing state of the art mining and exploration capabilities while overcoming the scalability constraints faced by graph databases dealing with big data.

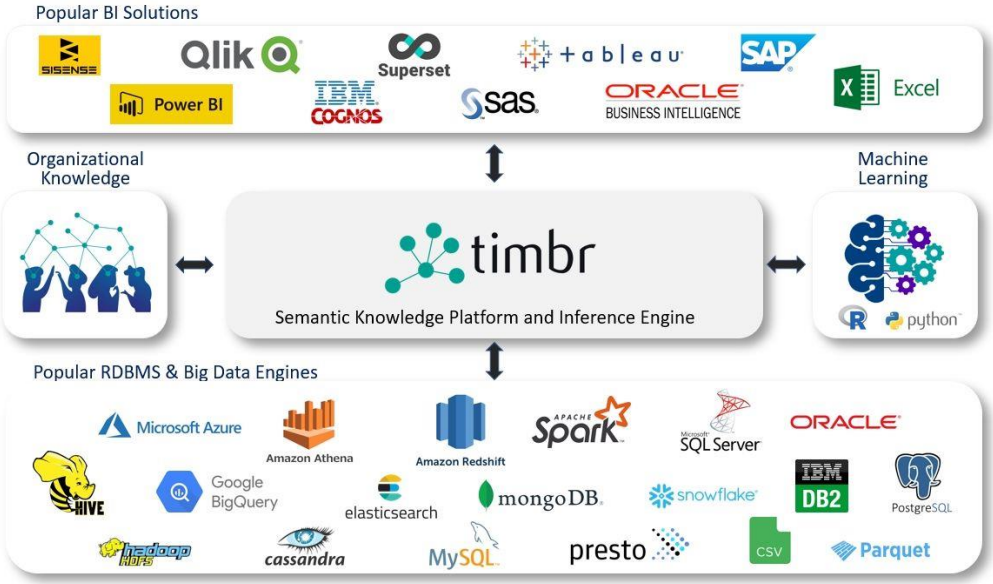
Features

- Modeling and managing ontologies in SQL
- Query of ontologies in SQL
- Semantic inference at run-time
- Graph traversals
- Scalability to whatever the back-end scales
- Graph data exploration
- Support of OWL ontologies and their mapping to any SQL engine
- Supports conversion of schemas, taxonomies and data catalogs into SQL ontologies mapped to the underlying data
- Logic composition: Logic and business rules written in SQL and embedded in concepts to enable smarter and efficient ML algorithms



Enabling Analysts and Domain Experts

timbr provides direct JDBC/ODBC connection to the popular Business Intelligence solutions. The platform supercharges analysts and domain experts as they work with the ontology instead of directly with the data warehouse or data lake.



Powerful Machine Learning-Big Data Integration

timbr's connected, context-enriched concepts embedded with reasoning capabilities and conveniently queried in SQL, provide the most accessible architecture for ML algorithms and data enrichment. **timbr** enables ontology query via DataFrames in Python, R, Java, and Scala. Accessible to Python via SQLAlchemy and easily imported into Python Pandas library.

Availability: **timbr** may be licensed for use in the Cloud as SaaS or installed on-premises.

Contact Us:

timbr.ai

Europe: +972.9.372.0090, USA: +1 .832.998.8697

www.timbr.ai

mailto:contact@timbr.ai