



Predictive Maintenance and Quality

Instrumented and connected assets generate massive amounts of structured & unstructured data, which are spread across multiple silos. That puts manufacturers at risk of making blind decisions. Using Stardog to create a single, unified view of all data, regardless of format, line of business, data velocity, or data type, is the first step to smarter manufacturing. Stardog offers the speed, data modeling, integrated reasoning and machine learning to pinpoint exactly which processes to optimize, increasing yield and reducing defects in production.

Supply Chain and Logistics

Globalization and outsourcing increase the complexity of supply chains and logistics. The inherent complexity of modern supply chains seems only ever to increase. Graph databases are a natural solution to manage the 'nodes and edges' of a complex supply network. Stardog goes beyond plain graph database capability. With the Knowledge Graph, manufacturers can use a single platform to gain a comprehensive view of product quality and delivery accuracy within the supply chain. Knowledge Graph makes supplier auditing easier and more transparent, which improves quality across the supply chain.

Product and Engineering Lifecycle Management

Companies are often diverted from product development and lifecycle management by data management challenges. Three key features of an effective data model are trackability, traceability, and transparency. Regardless of your ERP, it needs to be simple to understand and use, scalable, extensible, and, critically, it must not be yet another data silo! The Stardog Enterprise Knowledge Graph lets you and your partners instantly adjust to volatile market dynamics and demand. The Knowledge Graph can unify data silos across management, design partners, suppliers, dealers, and service providers. Interoperability and integration increase the effectiveness of product development and maximize the value of existing IT assets and infrastructure.

Health & Safety

Manufacturers face some of the strictest restrictions around health and safety. It is not uncommon to see mechanical failures which require engineers to perform repairs and maintenance in either dangerous or hazardous conditions. Stardog's Knowledge Graph unifies disparate data silos, including failure data, operational hazards data, as well as safety and compliance rules related to previous accidents and causes. Providing a unified "Manufacturing Safety Graph" provide information in one place to drive process, maintenance, and safety improvements throughout operations and facilities.

WHY KNOWLEDGE GRAPH BEATS RELATIONAL IN MANUFACTURING SERVICES

Virtual Graph Capability

RDBMS often act as systems of record. Stardog can query existing silos in place, including mixed and diverse databases, data sources, and data sets, to create a powerful virtual graph in real time, leaving data and domain schemas in place, which conveys huge speed-to-benefit advantage and slashes ETL and data migration costs.

Machine Learning

Stardog is the only platform that lets you to create, train, and update machine learning models at the level of graph query language against live data silos rather than stale "training data" or copies of copies. This enables Stardog's machine learning capabilities to act over a virtual graph, with the benefit of data enriched by inference and logical reasoning. So Stardog solves one of the biggest problems of machine learning in the enterprise: speed. Data scientists can create curated datasets for training models faster, then train and query them immediately.

Semantic Reasoning

Stardog has the most advanced combination of graph data modeling, logical and statistical inference, and declarative rules integrated into the Knowledge Graph that can be found anywhere. And all of that is deeply integrated in the Knowledge Graph. Graphs built in Stardog flow through a declarative model that enriches the data and makes implicit facts explicit. Being able to apply logical inference and rules at query time means that users can consume data through the lens of a subject matter expert's

Virtual Graphs

Query existing mixed and diverse databases, data sources, and data sets to create a powerful virtual graph in real time, leaving data and domain schemas in place. This flexibility conveys huge speed-to-benefit advantage and slashes ETL and data migration costs

Semantic Reasoning & Standards

Most advanced combination of logical reasoning, inference and rules integrated into the Knowledge Graph

Machine Learning

Create, train, and update models from Stardog's query language and solve one of the biggest problems of machine learning in the enterprise: speed

GraphQL

Load RDF and run GraphQL queries right away

Powerful Data Model

Supports a rich modeling language and user-defined rules

High Availability Cluster

Collection of server instances behave like a single instance for uninterrupted operations, redundancy and high query volume

BITES

Bring unstructured content in through external processors

CUSTOMER TESTIMONIALS

“Stardog is incredibly easy to use. I learned to launch the platform and begin integrating data sources in a single day.

—Data Architect, Global 2000 Manufacturer

We onboard data from all of the organization's back office systems...and convert it to higher level models in the Stardog Knowledge Graph. **It's like Google.**

—Senior Director, Fortune 500 Manufacturer