

# SEMAPHORE

BY  MarkLogic®

SEMANTIC AI  
TECHNOLOGY

## ENCODING WHAT WE KNOW ABOUT DATA

To achieve success in your digital transformation efforts, you need to go beyond just integrating your existing data. You need to enrich it and make it more complete – make it better, more consumable, and more trusted. The way you do that is with metadata. Semaphore by MarkLogic provides contextual, high quality, integrated and secure metadata to the MarkLogic semantic data platform to drive customer experience. product innovation. trusted intelligence. and smarter decisions.



## CREATE AND INTERPRET METADATA

Semaphore provides the semantic layer in your digital ecosystem so you can manage knowledge models, automatically extract and classify the context and meaning from structured and unstructured information, and generate rich semantic metadata.

- Auto-generates rules for use with algorithms based on semantic models to classify and derive metadata values associated with structured & unstructured data – internal and external to the enterprise
- Leverages ML and NLP capabilities – using authoritative knowledge models – to create enriched metadata that incorporates hidden facts and relationships
- Text mining, entity identification, and extraction capabilities based on AI, NLP, and ML in a cooperative approach between human supplied knowledge and software

## FULL EDITORIAL CONTROL – EASY TO USE

Semaphore's innovative, advanced, and unique semantic capabilities are delivered in a no-code solution that allows you to generate and apply knowledge rapidly and accurately.

- Semantic knowledge models harmonize enterprise subject-matter expertise and business language – creating a centralized “source of truth” used across systems, applications, and business users
- Easy to use – web-based, feature-rich software that supports model development processes
- Collaborative software product – stakeholders participate in model development to enhance buy-in
- Leverage linked data – incorporates reference information from linked data sources (industry, internal, and subject models), to rapidly enrich managed models and accelerate time to value
- Task-based model governance – model changes are task-centric to drive workflows and improve feedback loops

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## TRUSTED DATA FOR SMARTER DECISIONS

**Auditable & transparent** – Full audit trail; decisions can be traced to the source; users trust and understand decisions

**Repeatable & legally compliant outcomes** – Classification outcomes are reproducible for a point in time, and classification on a single asset using the same model and rule-base result in the same outcome

**Accurate** – Subject matter expert review and controlled approvals of model and classification enrichment as well as transparent traceability, results in explainable and trustworthy outcomes

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## BUILT FOR THE ENTERPRISE

**Flexible deployment options** – Cloud, on-premises, hybrid, on-demand – that support any technical enterprise architecture, regardless of organization size or type

**Scalable** – Can expand as needs and data volumes evolve, with development, business, and enterprise adoption models

**Unlimited support for knowledge models** – Concepts, labels, relationships, languages, and users can be quickly added

**Classification throughput** – Scales to classify multiple millions of digital assets per day. Provides text analytics capabilities using AI, NLP, and Machine Learning (ML) to classify digital assets, create and apply metadata, and extract textual information in a precise and consistent manner

Semaphore by MarkLogic integrates and semantically enhances upstream and downstream systems – out-of-the-box integrations with standard industry software and integration tool kits. W3C Standard adherence ensures interoperability and zero lock-in.