



Powering AI with Trusted, Enterprise Data

A unified approach from Denodo and AWS to simplify access, strengthen governance, and accelerate AI-driven outcomes

Executive Overview

Organizations are investing heavily in AI to drive innovation and improve decision-making. Yet many struggle to move beyond experimentation because their data foundation is not designed to support the scale, speed, and trust that modern AI requires.

While AWS provides powerful capabilities for building and deploying AI, data remains distributed across cloud, on-premises, and SaaS environments, often lacking consistent context, governance, and real-time accessibility. As a result, AI initiatives are slowed by data preparation, produce inconsistent outcomes, or fail to scale.

Denodo and AWS address this challenge by enabling a unified, AI-ready data foundation. By combining AWS's scalable services with Denodo's logical data management approach, organizations can deliver live, governed, and business-ready data to AI models and applications without data movement or duplication.

This allows teams to accelerate development, improve trust in AI outcomes, and scale initiatives more efficiently, turning data into a strategic enabler of AI-driven business value.

The Business Challenge

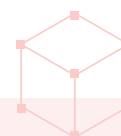
Organizations are under pressure to deliver real business value from AI. However, the underlying data foundation often limits progress.

Data teams must support growing AI demands while expanding access across the business. At the same time, AI teams expect fast, reliable access to trusted data without managing integration and governance complexity.

This creates several challenges:

- AI systems rely on stale or incomplete data
- Data is fragmented across AWS, on-premises, and SaaS environments
- Business context is inconsistent across systems
- Governance and security are difficult to enforce uniformly
- Architectures built for analytics struggle to support continuous AI decisioning

As a result, many AI initiatives stall in pilot phases or fail to scale with confidence.



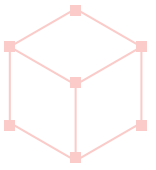
RECOGNIZED LEADER IN DATA INTEGRATION

Denodo has been named a Leader in the Gartner Magic Quadrant for Data Integration Tools for six consecutive reports, reflecting its ability to support modern, distributed data architectures.

FIVE-TIME CUSTOMERS' CHOICE FOR DATA INTEGRATION

Denodo has been recognized as a Customers' Choice in the Gartner Peer Insights Voice of the Customer for Data Integration Tools for five consecutive years, based on verified customer feedback.





Why Traditional Approaches Fall Short

Many organizations rely on lakehouses, ETL pipelines, and direct integrations within AWS. While effective for analytics, these approaches introduce trade-offs for AI:

- Data movement increases cost and complexity
- Point-to-point integrations do not scale
- Business meaning becomes inconsistent across systems
- Governance is fragmented across platforms

These approaches remain valuable, but they were not designed for environments where AI systems must continuously access and act on distributed data.

The Solution: A Unified, AI-Ready Data Foundation

Organizations can overcome these challenges by combining AWS with Denodo's logical data management approach.

Together, they provide a unified data foundation that delivers live, governed, and business-ready data across the enterprise without replication.

With this approach:

- Data remains in AWS, on-premises systems, and SaaS platforms
- Denodo unifies access, applies business context, and enforces governance
- AI teams can directly access trusted data in environments like Amazon SageMaker
- Data is delivered as reusable, governed data products

These approaches remain valuable, but they were not designed for environments where AI systems must continuously access and act on distributed data.

How It Works: A Practical Path to AI-Ready Data

Organizations can take a simple, scalable approach:

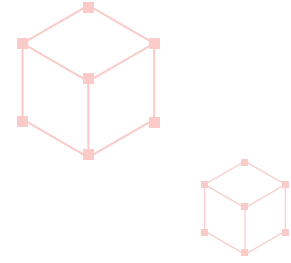
1. **Establish a shared understanding of data:** Create a semantic layer that standardizes definitions and relationships across all sources
2. **Deliver trusted, reusable data products:** Package data with context, quality, and governance for reuse across use cases
3. **Enable AI with standardized access:** Provide consistent, governed access through APIs and SDKs for AI agents and applications

This ensures AI systems operate on the right data, with the right context, under the right controls.

Key Capabilities

- **Unified Data Access Across AWS and Beyond:** A single access layer connects data across AWS, on-premises, and SaaS environments without replication, reducing integration effort and accelerating AI development.
- **Consistent Business Semantics:** A shared semantic layer standardizes definitions and context, ensuring consistent interpretation across users and AI systems.
- **Centralized Governance and Control:** Security and compliance policies are applied consistently across all data access, enabling safe and scalable AI adoption.
- **Live Data Access for AI:** Data is accessed where it resides, allowing AI systems to operate on current, context-rich information.
- **Reusable Data Products with Standardized Access:** Data is delivered as governed, reusable products accessible through APIs, SQL, and MCP, reducing duplication and enabling scale.

Business Outcomes and Value



A unified, governed data foundation enables organizations to:

- Accelerate AI development and time to value
- Improve trust and accuracy of AI-driven decisions
- Reduce cost and complexity by minimizing data movement
- Strengthen governance and compliance
- Increase productivity through self-service access
- Scale AI initiatives without increasing operational overhead

These outcomes help organizations move from isolated AI experiments to scalable, trusted AI adoption.

Example Use Cases

AI-READY OPERATIONAL DATA FOR PERSONALIZATION

Organizations can unify customer data across AWS, SaaS, and on-premises systems to deliver a complete, real-time view of the customer. This enables AI systems, including Amazon Bedrock, to deliver more accurate and relevant personalized experiences.

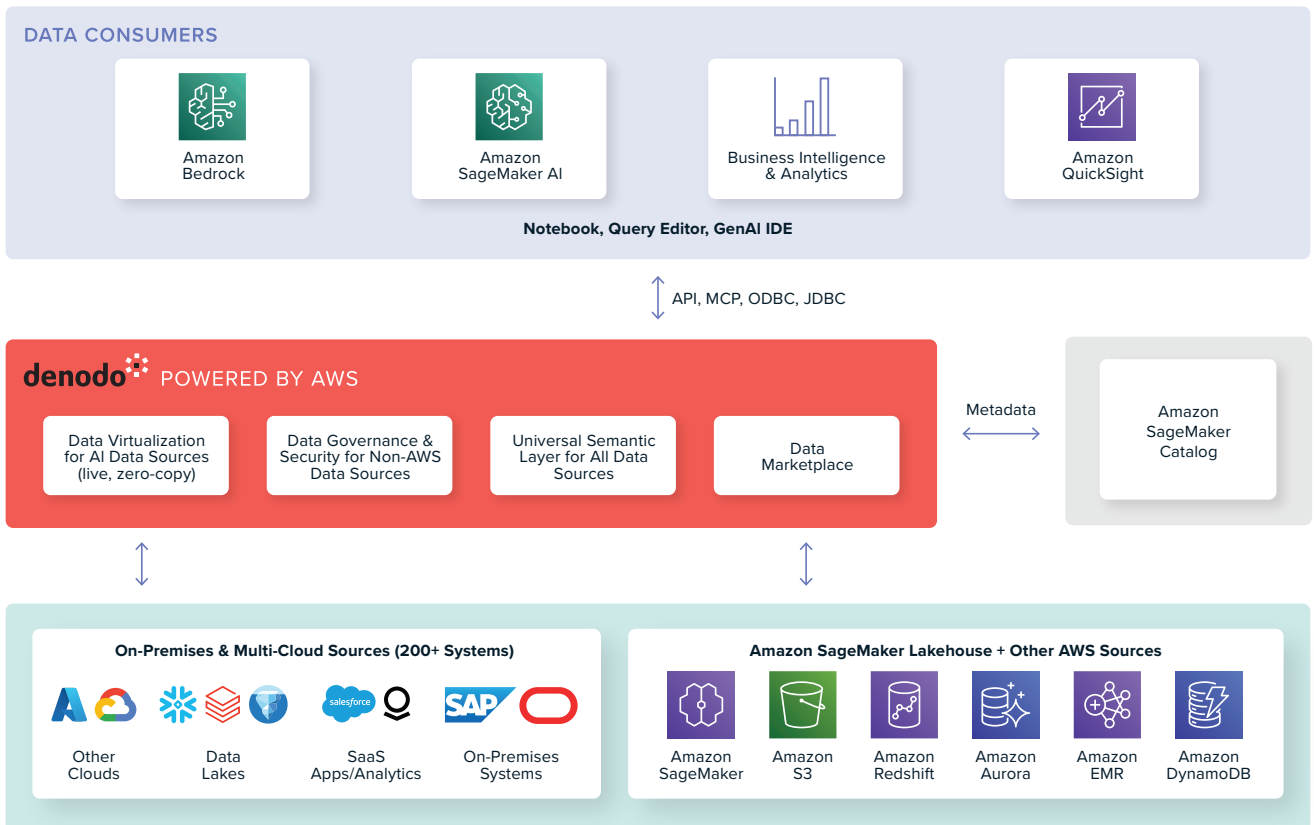
ACCELERATING INTELLIGENT AI AGENTS

A unified, governed semantic layer provides a single source of truth across distributed environments, enabling faster development of AI agents and more accurate, context-aware responses.

ARCHITECTURE: A UNIFIED DATA FOUNDATION ACROSS AWS AND THE ENTERPRISE

Denodo and AWS provide an architecture that integrates seamlessly into existing environments without disruption.

AWS delivers scalable infrastructure for data, analytics, and AI. Denodo acts as a logical layer with connectivity across key AWS services, including Amazon Redshift, data lakes, and streaming services, as well as on-premises and multi-cloud sources, unifying access, meaning, and governance.



This architecture enables:

- Unified access to data across all environments
- Consistent business context through a semantic layer
- Centralized governance applied across all data sources
- Live, zero-copy access to current data
- Reusable, governed data products for AI and analytics

Recent innovations further strengthen this integration by expanding how AI systems securely access and act on enterprise data. Denodo enables governed, enterprise-scale access for AI agents through AWS services such as AgentCore, aligns business metadata with Amazon SageMaker Catalog for consistent context, and enhances AI-driven workflows with Amazon Quick. Together, these capabilities ensure AI systems operate with trusted data, shared meaning, and centralized control across distributed environments.

The result is a flexible architecture that allows organizations to innovate on AWS while maintaining a unified, governed data foundation across the enterprise.

Take the Next Step

Organizations that succeed with AI start by strengthening their data foundation. Denodo and AWS make it possible to unify data access, apply consistent governance, and deliver trusted, AI-ready data across the enterprise.

To get started:



REQUEST A TAILORED DEMO OR WORKSHOP

Work with experts to identify high-impact AI use cases and define a path to implementation.



TRY DENODO FOR FREE

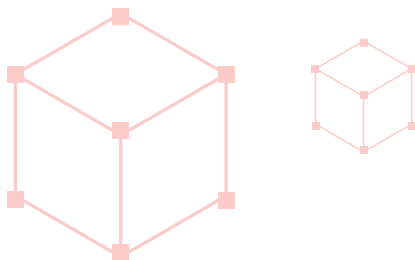
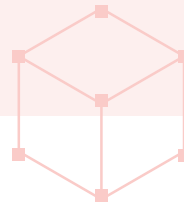
Get hands-on with the Denodo Platform - Developer Tier and experience unified data access across your environment.



FESTO: SCALING GENAI WITH TRUSTED, UNIFIED DATA

Festo unified SAP, AWS, and enterprise data using Denodo to deliver live, governed access across its organization.

This enabled the development of FestoGPT, improving access to data, accelerating GenAI initiatives, and creating a scalable foundation for innovation.



Unified data is why AWS and Denodo are better together



AWS Marketplace | denodo.com/aws