denodo × databricks

Unlock the Full Potential of Your Databricks Lakehouse—Faster

Adopting a Databricks data lakehouse is a big step toward modernizing your data, but making it truly work for you takes more. Denodo speeds up time to value by making data easy to find, access, and use—whether for AI, analytics, or self-service insights. With a semantic layer and federated governance, Denodo removes roadblocks in discoverability, governance, and usability, so teams can make faster, smarter decisions. By putting trusted, AI-ready data at your fingertips, Denodo helps you get more from your lakehouse—without the hassle or the wait.

Denodo and Databricks Integration Points

The Denodo Platform seamlessly integrates with Databricks through connectors for SparkSQL, support for lakehouse file formats like Delta Lake, and integration with data science notebooks.

KEY BENEFITS OF THE JOINT SOLUTION

A full-featured data platform like Databricks is often not quite enough to fulfill all the requirements of a modern data strategy. However, combined with the Denodo Platform, Databricks can enable a future-proof data strategy that can meet virtually any modern use case.

Working together, a joint Databricks/Denodo Platform implementation enables:

Accelerated Data Delivery: Denodo and Databricks work together to streamline data access and delivery, empowering users with real-time data for faster decision-making.

Enhanced Data Governance and Security: Denodo's centralized security and governance features extend Databricks' capabilities, ensuring data security and compliance.

Improved Data Discovery and Awareness: The Denodo Platform's data catalog and self-service tools make it easier for users to find, understand, and use all data.

Reduced Costs: Denodo's optimization capabilities and Databricks' cloud-native architecture help organizations optimize infrastructure costs.

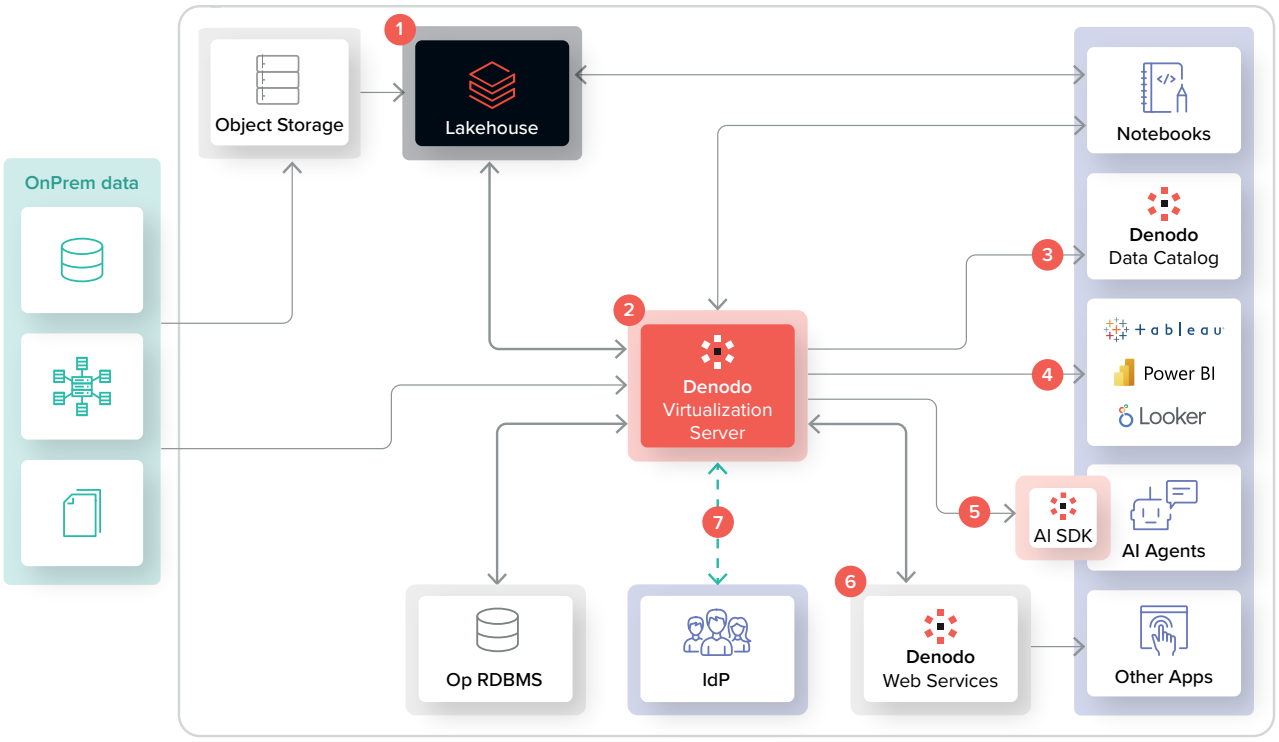
Unified Data for BI and ML: This solution unifies data from Databricks and other sources, supporting a wide range of use cases, from BI reporting to advanced analytics and ML.

Future-Proof Data Architecture: Denodo's logical approach allows organizations to adapt to future changes in their data infrastructure without impacting data access.

By combining the Denodo Platform's logical data management capabilities with Databricks' lakehouse architecture, organizations can implement a modern data strategy that empowers data-driven decision-making across the enterprise. This joint solution delivers agility, flexibility, performance, and security, unlocking the full potential of your data.

Denodo and Databricks Reference Architecture

IN AWS, MICROSOFT AZURE, AND GOOGLE CLOUD



CLOUD SERVICES

Object Storage	Op RDBMS	IdP
Amazon S3	Amazon Aurora	AWS SSO
ADLS	Azure SQL	Microsoft Entra ID
Google Cloud File System	Google Cloud Spann	Google Identity Platform

1. **Modern Analytics Foundation** – Databricks' Delta Lake innovation and investment in open data management frameworks have made the lakehouse model a dominant approach in modern analytics architectures.
2. **Unified Data Access** – The Denodo Platform complements Databricks by adding a semantic layer that unifies access to all data, starting with the lakehouse and extending to operational systems, cloud platforms, on-premises databases, and hybrid or multi-cloud environments.
3. **Data Discovery & Cataloging** – Denodo's Data Catalog offers a marketplace-style experience where data consumers can explore, discover, and access data with ease. It includes rich business semantics, clear data relationships, contextual metadata, view and field documentation, and data profiling, helping both end users and LLMs quickly find, understand, and trust relevant data.
4. **Seamless Analytics Integration** – With Denodo's universal semantic layer, data consumers can access a single, centralized location for all their data, regardless of format or location. This eliminates the need to maintain semantics separately across multiple analytics tools.
5. **GenAI & AI Agent Enablement** – The Denodo AI SDK simplifies GenAI workflows through REST API calls, abstracting LLM orchestration with tools like LangChain and vector database embedding. By removing complexity, it enables anyone familiar with REST to build AI Agents or Chatbots without requiring specialized AI expertise.
6. **API-Based Data Access** – Applications that require API-based access to enterprise data can leverage Denodo's native support for REST, OData, and GraphQL, ensuring flexible and scalable data integration.
7. **Governance & Security Enforcement** – Denodo supports a wide range of Identity Providers and offers fine-grained access control with ABAC (Attribute-Based Access Control) and RBAC (Role-Based Access Control) policies, integrating metadata from tools like Collibra to enforce sensitive data protections using PII tagging and other classifications.