



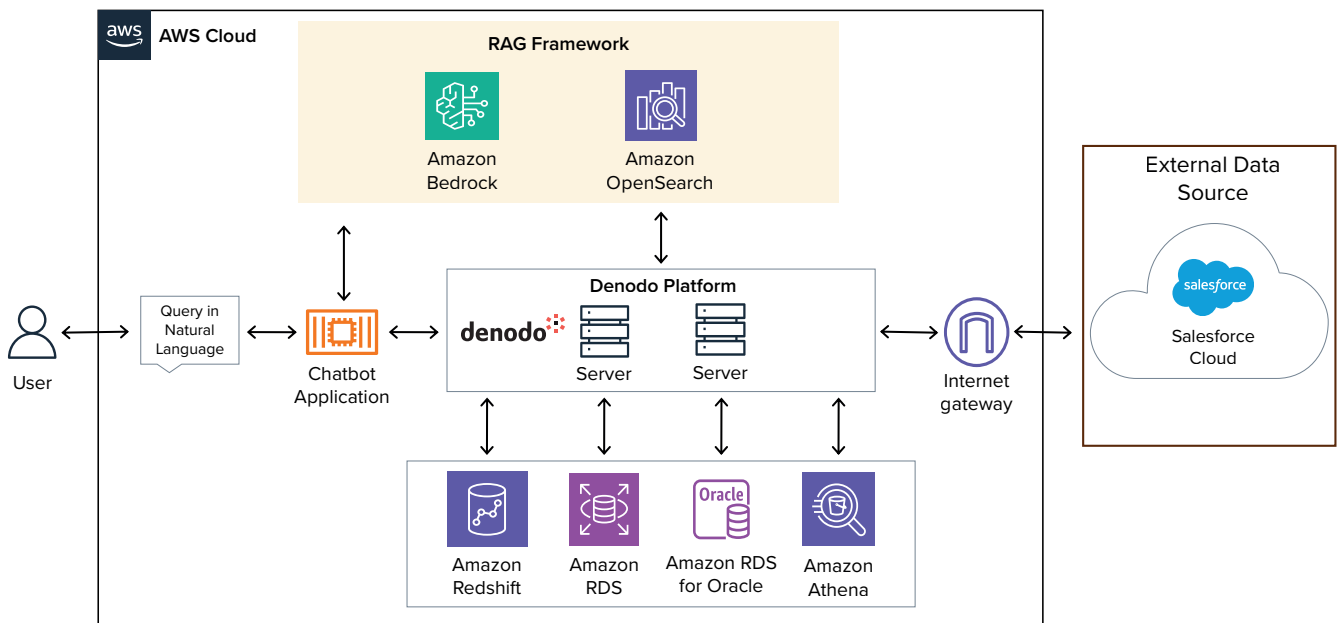
Enabling Powerful Generative AI Applications with the Denodo Platform and Amazon Bedrock LLMs

Despite the many promises of generative artificial intelligence (GenAI), many organizations are still struggling to build GenAI applications that meet business goals, and within a reasonable timeframe. Denodo and AWS are working to change that, by combining the Denodo Platform’s logical data management capabilities with Amazon Bedrock large language models (LLMs). This combination will streamline the development of powerful new GenAI enterprise applications that demonstrate security, privacy, and responsible AI.

Enterprise GenAI applications often fail to deliver their expected value because LLMs, “out of the box,” do not know where to find the most accurate, authoritative enterprise data which to answer questions. For enterprise applications, the right information is often not on the public Internet but on proprietary enterprise systems. The retrieval augmented generation (RAG) framework addresses this problem by introducing an intermediary step in the query process that points the LLM to the authoritative data sources, many of which will be internal to the enterprise.

KEY BENEFITS

The Denodo Platform feeds Amazon Bedrock LLMs with governed, trusted, and AI-ready data from within the enterprise, within a RAG framework, leveraging Amazon OpenSearch as the vector database. The Denodo Platform enables a unified semantic layer above the underlying data sources, which simplifies access and facilitates end-to-end data governance and security. Leveraging a logical approach to data management, the Denodo Platform enables an enterprise-wide data fabric that can deliver real-time data to an LLM, minimizing reliance on extract, transform, and load (ETL) processes. With this architecture, all data in the organization can be accessed through RAG-enabled queries, yet data is only exposed to the authorized user who asks the question.



Up to 65% faster than ETL

Up to 67% less data preparation time

Less than 6 months breakeven time

Source: Forrester Total Economic Impact™ of Data Virtualization, 2021



- Amazon Redshift Ready
- Data & Analytics Software Competency
- AWS Marketplace Seller

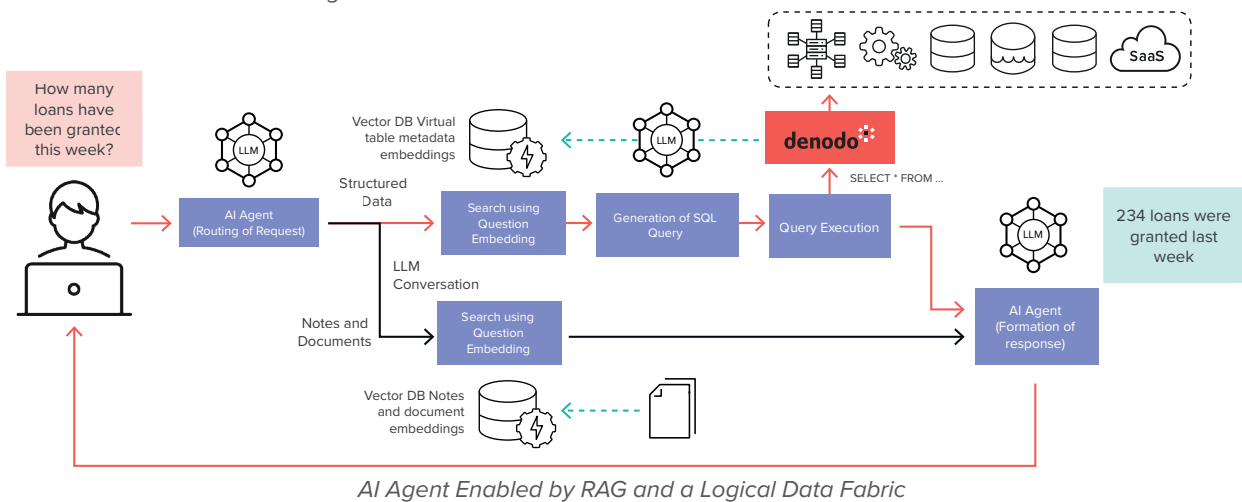
REALIZING THE POWER OF GenAI

The joint Denodo/AWS solution enables a wide range of powerful use cases, including:

- 1. Advanced Predictive Analytics for Business Intelligence.** The Denodo Platform's data fabric integrates and harmonizes data across the enterprise, providing a unified view for analysis, and the Amazon Bedrock LLM can leverage this view to perform advanced predictive analytics, identify trends, and generate actionable insights for strategic decision-making.
- 2. Risk Management and Compliance Monitoring.** Leveraging the Denodo Platform's ability to consolidate and manage regulatory data, financial records, and operational data across the enterprise as a trusted data foundation, the Amazon Bedrock LLM can monitor compliance, detect anomalies, and predict potential risks, facilitating adherence to regulations.
- 3. Enterprise Amazon-Bedrock-Enabled Chatbots.** Through RAG, the Amazon Bedrock LLM is directed to particular authoritative data sources within the enterprise when answering a question. The Denodo Platform provides enterprise data to the LLM that is trusted, secured, and authoritative, for the most accurate answers free of hallucinations or confabulations.
- 4. Enhancing Developer Productivity and Simplicity.** Improved usability by end users via the adoption of natural language queries, increased productivity in development with an AI-based copilot that helps during the development of views, and simpler administration and stewardship of the system, for example with query performance tuning recommendations based on the past activity.

GenAI USE CASE OF A CHATBOT BEING USED BY A BANK

A user might ask the GenAI application a question, such as "How many loans were granted last week." The LLM routes the question through the RAG framework and sends an SQL query to the Denodo Platform's data fabric, which finds the data wherever it is stored, prepares it for the LLM, and delivers it back to the LLM, which puts the data into words and delivers them back to the user: "234 loans were granted last week."



AI Agent Enabled by RAG and a Logical Data Fabric

BRING ADVANCED, ENTERPRISE AI-READY DATA TO YOUR AMAZON BEDROCK LLMS.
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