



INDUSTRY

Data Virtualization

COMPANY OVERVIEW

Denodo is the leader in data virtualization software that enables businesses with timely and comprehensive strategic business information.

Headquartered in Palo Alto, CA and with offices and a partner network worldwide, Denodo provides a data integration and data virtualization software called the Denodo Platform for data virtualization, as well as support, training, and consulting services.

PRODUCT OVERVIEW

The Denodo Platform offers the broadest access to structured and unstructured data residing in enterprise, big data, and cloud sources, in both batch and real-time, exceeding the performance needs of data-intensive organizations for both analytical and operational use cases, delivered in a much shorter timeframe than traditional data integration tools.

DENODO BENEFITS

- Better Quality Information – richer, complete data.
- Lower Integration Costs – by 80%.
- Increased Agility – flexibility to change without disruption.
- Fast Time to Solution – go live in 4–6 weeks; ROI in less than 6 months.

www.denodo.com

Cloudera and Denodo

Use Cases for Big Data Virtualization

Big data and the technologies that were built around it have changed the rules of the game for data integration and management. Intelligent business insights derived by combining data from anywhere, anytime and delivered in any format gives organizations the agility to function more efficiently and deliver superior products and services. However managing the volume of big data with the rest of the enterprise data sources is still a challenge. An analytics-ready Hadoop platform and a data virtualization platform together provide organizations with the power to access, integrate and deliver data.

Denodo Platform and CDH

Cloudera Distribution Hadoop (CDH) and the Denodo Platform for data virtualization together can process, integrate and make data available to consuming applications.

Let's explore some typical use cases that demonstrate the power of the CDH-Denodo Platform joint solution.

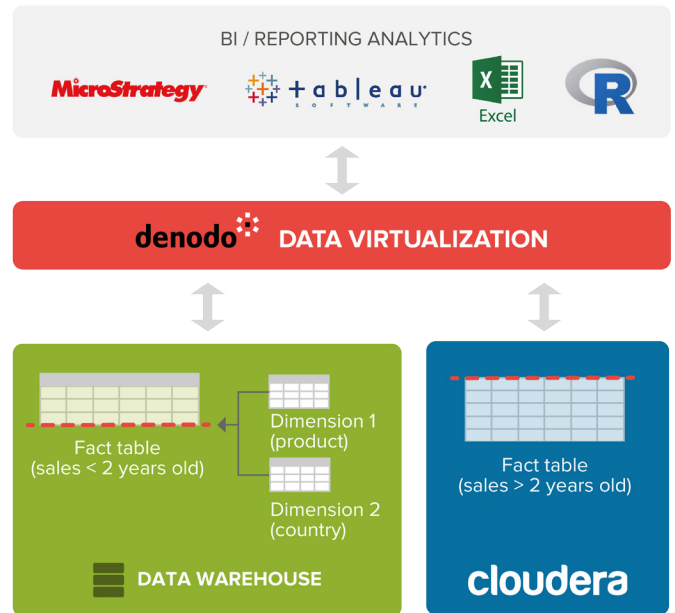


1. DATA WAREHOUSE OFF-LOADING

It makes business sense to store and process current or hot data in the enterprise data warehouse and store historical or cold data in an affordable and less expensive Hadoop repository. The frequency of usage for day-to-day analytical and operational functions decides whether a piece of data is considered hot or cold.

For example in a business report containing historical risk management data, rows containing flood information for the current calendar year for a geographical location would be hot data and flood information prior to that, would be cold data. Such a report that requires a combination of information involving the current data in the enterprise data warehouse and historical flood data in CDH can be created in matter of hours using the Denodo Platform.

The Denodo Platform with its abstraction layer prevents the data from being siloed in the two repositories. The Denodo Platform for data virtualization helps to combine the cold data offloaded to CDH and the hot data in the enterprise data warehouse without having to move any data physically.



The Denodo Platform allows users to keep the partition invisible and make the two data sets appear like a single data set available in one location so the data consumers are decoupled from the actual location of the data. In this way, the Denodo Platform helps businesses to realize the intended purpose and benefits of partitioning the repositories for hot and cold data.

CLUDERA ENTERPRISE BENEFITS

Stores and Analyzes Any Type of Data

- Leverage the full power of your data to achieve pervasive analytics, increase business visibility, and reduce costs.
- Bring diverse users and application workloads to a single, unified pool of data on common infrastructure; no data movement required.

Enterprise Approach

- Compliance-ready perimeter security, authentication, granular authorization, and data protection through encryption and key management.
- Enterprise-grade data auditing, data lineage, and data discovery.

Industry-Leading Management and Support

- Best-in-class holistic interface that provides end-to-end system management and zero-downtime rolling upgrades.
- Open platform ensures easy integration with existing systems.
- Open source to achieve stability, continuous innovation, and portability.

www.cludera.com

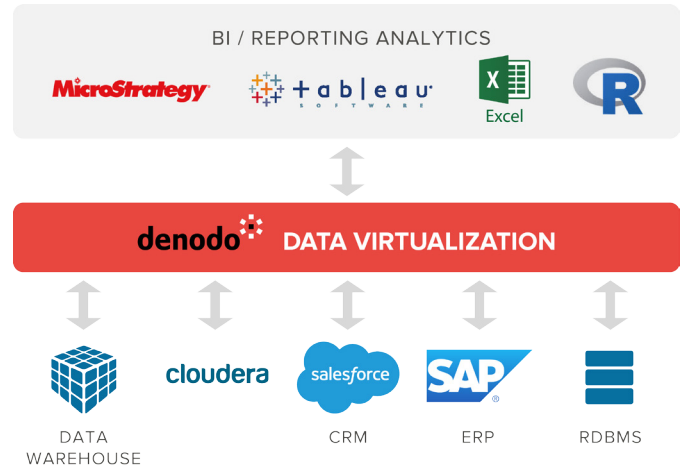


2. LOGICAL DATA WAREHOUSE

The Logical Data Warehouse is a data virtualization architecture that unifies the enterprise data warehouse with other enterprise data sources. The data virtualization layer holds virtual views that define a common data model. This data is consumed by client applications from the centralized data virtualization layer. With this logical data warehouse architecture in place, both the enterprise data warehouse and the ETL processes that feed it can be combined with new, more agile data sources such as CDH.

The Denodo Platform allows users to bridge both types of data and present them to data consumers as a unified view.

The data consumers do not need to know where the data is coming from or how it is stored. They just access the common model published by the data virtualization layer. This architecture allows the full potential and capabilities of CDH to be used along with the traditional data warehouse.

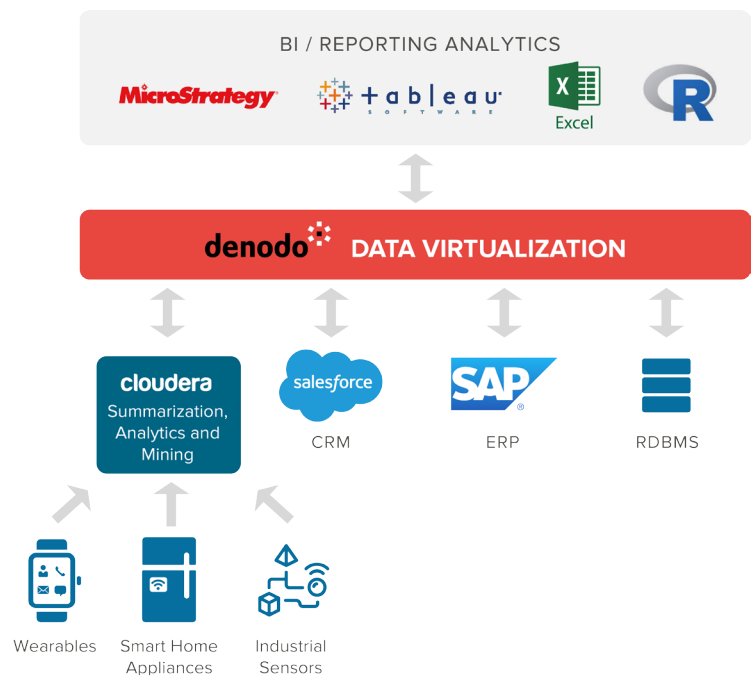


3. INTERNET OF THINGS (IoT)

The Internet of Things (IoT) connects remote assets and provides a data stream between the assets and the operational systems inside the enterprise. CDH stores and processes streaming data and the results of this processing can then be combined easily with other data sources in the enterprise using the Denodo Platform.

Valuable customer or product related information streamed from sensor embedded devices can become old and not used optimally at the right time, due to the data being siloed and not available for business insights. The shelf life of streaming data can be a matter of hours or even minutes.

The Denodo Platform can be used to combine streaming data from equipment sensors, stored in CDH, with data from a CRM system, for example, that holds customer support ticketing data and/or revenue data from sales. This is valuable insight that can help make informed business decisions in time, on offering location based discounts for customer satisfaction and retention.



Denodo and CDH Deliver Business Success

These use cases throw light on the fact that the sleeping giant of big data can roar to action with the combined powers of CDH and the Denodo Platform. CDH and the Denodo Platform are well positioned to help enterprises optimize the power of big data analytics for greater business outcomes.

DENODO PLATFORM-CDH SOLUTION HIGHLIGHTS



Business agility and ROI from a unified virtual data layer that serves strategic enterprise-wide information initiatives.



The combined solution solves information needs for agile BI, big data analytics, web and cloud integration, single-view applications, and SOA data services across every major industry.



Denodo virtual layer combines data from CDH and enterprise data for optimal business information retrieval and cost savings.



Informed business decisions from seamless integration of IoT data with operational and analytical systems in the enterprise.



About Denodo

Denodo is the leader in data virtualization providing agile, high performance data integration and data abstraction across the broadest range of enterprise, cloud, big data and unstructured data sources, and real-time data services at half the cost of traditional approaches. Denodo's customers across every major industry have gained significant business agility and ROI by enabling faster and easier access to unified business information needs for agile BI, big data analytics, web and cloud integration, single-view applications, and enterprise data services. Denodo is well-funded, profitable and privately held.

www.denodo.com



About Cloudera

Cloudera delivers the modern platform for data management and analytics. The world's leading organizations trust Cloudera to help solve their most challenging business problems with Cloudera Enterprise, the fastest, easiest, and most secure data platform built on Apache Hadoop. Our customers can efficiently capture, store, process, and analyze vast amounts of data, empowering them to use advanced analytics to drive business decisions quickly, flexibly, and at lower cost than has been possible before. To ensure our customers are successful, we offer comprehensive support, training, and professional services.

www.cloudera.com