

Top 10 Frequently Asked Questions

1 What is data virtualization?

Data virtualization combines disparate data sources into a single “virtual” data layer that provides integrated data services to consuming applications in real-time.

2 Why is DV a recommended approach for companies needing agile data integration?

In the era of Big Data, the Web and Cloud, and exploding data volumes and heterogeneity, companies simply cannot afford to ‘warehouse’ all the data they need to use. DV leverages value from data of any type, and in any data source, to expose normalized and integrated data services that are optimized for performance and agility without the need to create more replicated data stores.

3 Why is DV cheaper and faster?

Physically moving and storing data multiple times costs money and slows you down when changes are needed. DV allows for replication, but only when it is necessary.

4 What projects or use cases are ideal for DV?

Any use case requiring access to disparate data, real-time information, dynamic requirements, and rapid deployment time are ideal for DV. Agile BI and reporting, data for single view of customer, logical data services, Web and cloud integration are projects where DV can replace or add value to traditional approaches. These are well proven cases.

5 Does DV support the integration of Web data?

The Web is inherently big, dynamic, heterogeneous, and the fastest growing data source. Only Denodo DV includes Web automation and semantic tools to easily and reliably extract Web and unstructured data and combine it with enterprise data, to produce immediate business value.

6 How does DV handle Data Quality requirements?

DV includes built-in tools for data matching, transformation, rewriting and enrichment based on “apply-on-the-fly” rule-sets (extensible with third-party tools). It can track source changes and data lineage, lending confidence to users..

7 What about DV performance?

The best DV platforms apply performance optimization techniques like intelligent cache, scheduler support, operation delegation, cost and rule-based optimization, asynchronous and parallel execution, and more to achieve scalable performance in highly demanding projects. Denodo is the performance leader in DV.

8 How is DV different from Data Federation tools?

DV goes far beyond query federation. Leading solutions like Denodo provide read and write access to every type of data and source, advanced integration, metadata and security features to support delivery of “virtual” high performance data services in scheduled batch, cache or real-time mode.

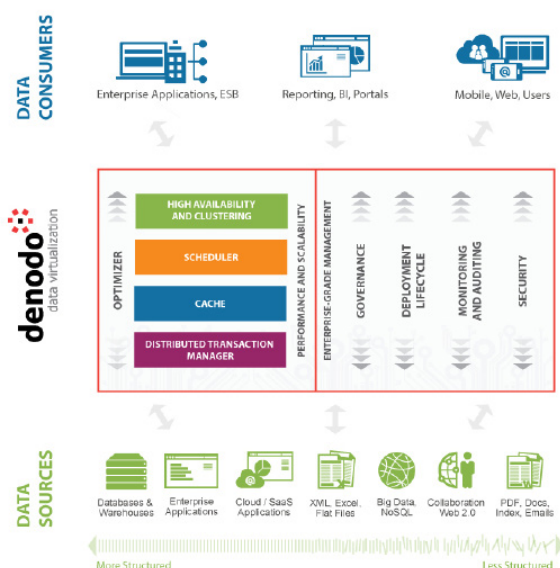
9 How does data virtualization complement a Data Warehouse infrastructure?

DV can be used for Data Warehouse extension, migration, prototyping, and federating multiple data sources to create virtual data marts. Denodo DV integrates with ESB, messaging to deliver agile real-time data services for SOA implementations.

10 What is the cost and ROI of DV?

The typical DV project pays back in less than six months and costs one-third of data replication methods or custom code solutions. The ROI commonly includes significant reduction in hardware, software, storage, development and maintenance costs. The experience of a best-of-breed DV vendor definitely helps

Denodo Platform Architecture and Benefits



- Easy Access to All Data
- Virtual Data Layer
- Minimizes Replication
- Optimized Performance
- Real-time (Right-time)
- Data Services Reuse
- Lighter, Flexible Integration
- Integrates with Existing Tools

Use Cases

Organizations are rapidly adopting data virtualization to meet the need for agile integration and real-time access to growing volumes of information assets from disparate sources. The following use cases illustrate how Denodo customers use high-performance data virtualization for stand-alone projects and to add enterprise-wide data services capabilities.



*“Data virtualization has **doubled the number of BI projects we completed on time**; as a Data Warehouse extension Denodo reduces cost and enriches BI with new data across internal and external systems.”*

Agile BI and Reporting

- Real-time Reporting, Analytics and Dashboards
- Access to New Internal and External Data
- Seamless Integration with Data and BI Tools
- Faster Results, Less Effort, More Flexibility
- Virtual Data Marts Cost Less



vodafone

*“Denodo helped us deliver real-time data from disparate sources **which increased agent productivity by 40%** and enabled better customer service.”*

Customer Service and Call Centers

- ‘Single-view of Customer’ Data Services
- Used in Call Centers, Customer Portals
- Improved Customer Service at a Reduced Cost
- Increased Staff Motivation and Effectiveness
- Improved Cross-selling and Up-selling



*“We **process millions of bill payments using Denodo** to automatically reconcile internal systems with Web and Cloud applications from telecom and utility providers.”*

Cloud and Web Data Integration

- ‘Business Insights from Web Information
- Automate Web Business Process Execution
- Integration with Cloud and SaaS Applications
- Enterprise and Web Mashups
- Social Media, Public and Partner Data



*“Denodo is like a **4GL for creating shared data services** for rapid and flexible application development.”*

Data Services

- Abstracted “Virtual” Data Services Layer
- Data Delivered as Reusable Data Services
- Decouples Applications and Users from Data Sources to Allow Both to Change Faster
- Access Control and Metadata Governance

Data Virtualization Use Cases are Infinite

- Data Warehouse Extension
- Real-time Virtual Data Marts
- Data Federation
- Federated MDM and Data Models
- Web Data Extraction
- Web Process Automation
- Social Media Integration
- Single View of Entity (Customer, etc.)