



Top 4 Data Challenges Addressed by Data Virtualization

DATA IS NOW BIG! Business users have access to an unprecedented volume of data that can potentially enable them to create new products and reach new customers and markets at unbelievable speeds. But ironically, the same data poses critical challenges that stop them from getting there. Data Virtualization helps companies to create a unified view of data and information by addressing 4 key challenges.

1. **“I cannot get to it”**—No access to the wealth of information in disparate internal silos and new and unstructured sources like big data.
2. **“It’s not current”**—Data delivered is not current, but a day or a week old.
3. **“I cannot understand it”**—Semantic views of data are not available and it is in a format that is hard to use.
4. **“It’s taking too long”**—Divergent priorities of IT and business lead to data requests taking weeks or months to clear and hamper many engagements.

In spite of substantial investments, traditional data integration and management tools do not address these challenges as they are too rigid and cannot deal with increasing data complexity, unnecessary replication and long batch windows. There is a burning need for a flexible integration solution that can access all required data from any source, transform it and deliver it to its destination on time and in a consumable format.

ADDRESSING THE DATA CHALLENGE: DATA VIRTUALIZATION

Data Virtualization is a technology which combines disparate data sources into a single “virtual” data layer that provides unified access and integrated on-demand data services to consuming applications in real-time (or right-time).

Data Virtualization is helping companies shift focus to using any and all data rather than storing, replicating, controlling etc. This is seeing fast

adoption by large firms to solve key data related challenges with new capabilities:

Access any data: Irrespective of whether the data is internal or external to the company, on the cloud, in a big data source or on a social media website, the Data Virtualization tool can access it, structure it and conform it to existing patterns making it easier to use. For example, a marketing executive should be able to extract reviews of a product from popular discussion forums and combine this information with standard data like leads, responses for analysis and reporting.

Deliver data in real-time, scheduled or cached mode as required: Business users have dynamic data needs and Data Virtualization has the flexibility to deliver in multiple modes depending on how current the data needs to be. For example, pricing analysts need real-time sales and turnover information on Thanksgiving (Black Friday Sale) while a one day delay may be acceptable on other days.

Provide meaningful information: Data Virtualization can enable business users to get a semantic view of data and also access it in multiple formats using BI tools or any enterprise application. The presence of a shared data services layer is critical in enabling use of data across analytical and operational uses with coherency.

Increase agility in data management:

The Data Virtualization capability of abstracting data from sources and publishing to multiple data consumers in real-time allows business and IT to collaborate and function iteratively, thereby reducing turnaround time for data requests considerably.

The unified data layer enabled by Data Virtualization also provides strong data governance and data security features. Data governance capabilities like monitoring and data lineage aid in quick impact analysis and error tracking, especially when data is being pulled from a variety of sources. Highly granular data security features (row and column level) ensure that there is no unauthorized access and leakage of confidential information. Thus, Data Virtualization helps a company to meet its business goals and ensures compliance with regulatory frameworks while also easing data management processes.

NEXT STEPS

Learn how Data Virtualization can add value to your company. Please contact info@denodo.com or call +1 877.556.2531 to discuss your next project, request a demo or evaluation copy.

