



Data Virtualization Changes the Game for Reporting & Analytics



INTRODUCTION

There is no question among executives and managers of all levels that harnessing the power of reporting and analytics software is essential to operating a successful business today. As we move further into the era of big data, new technologies, and savvy end users, the benefits of employing these tools in operating a business are becoming ever more pronounced. A few of these include:

- Better decision making throughout the organization
- Improved operating and cost efficiencies
- Ability to achieve higher levels of customer service
- Improved communication within an organization as reports and analysis are shared throughout
- Improved financial performance
- Discovering opportunities hidden in your data

This white paper offers some fundamental insights into how data virtualization is opening new possibilities in reporting and analytics software.

HOW DATA VIRTUALIZATION POWERS REPORTING AND ANALYTICS

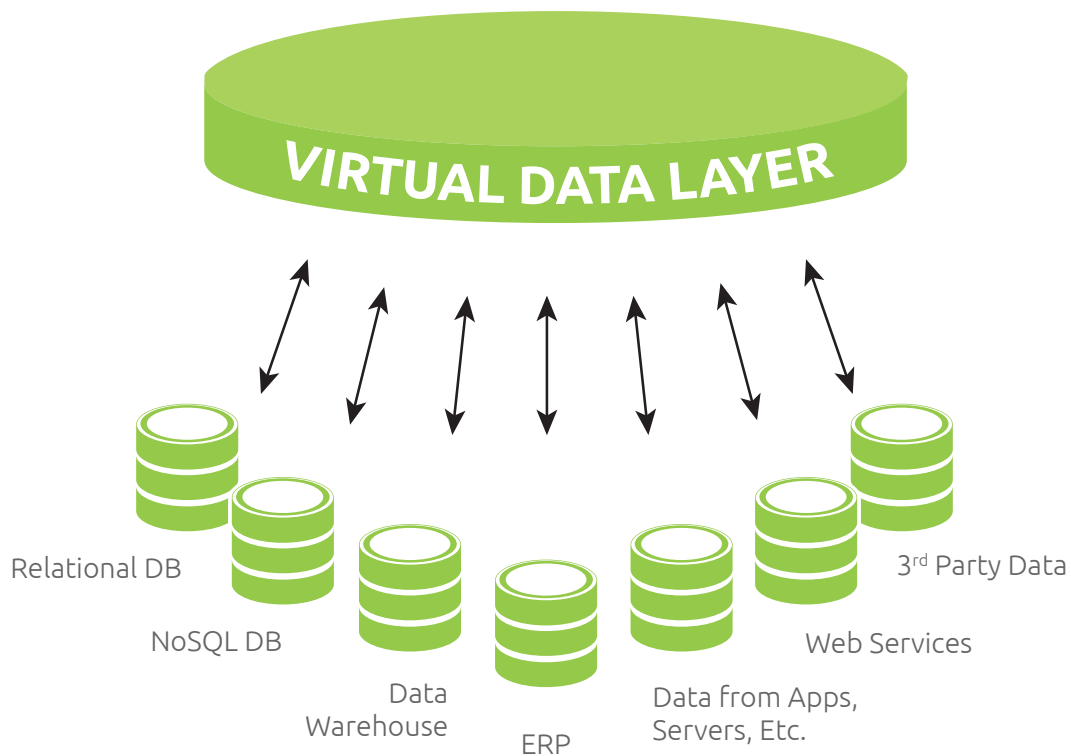
Data virtualization is an emerging data integration technology that changes the equation for reporting and analytics solutions. For those not familiar with the term, the following is a standard definition for data virtualization:

Data Virtualization abstracts data from multiple disparate sources creating a unified virtual data layer that provides users easy access to the underlying source data.

The chart below provides a graphical understanding of how data virtualization works.

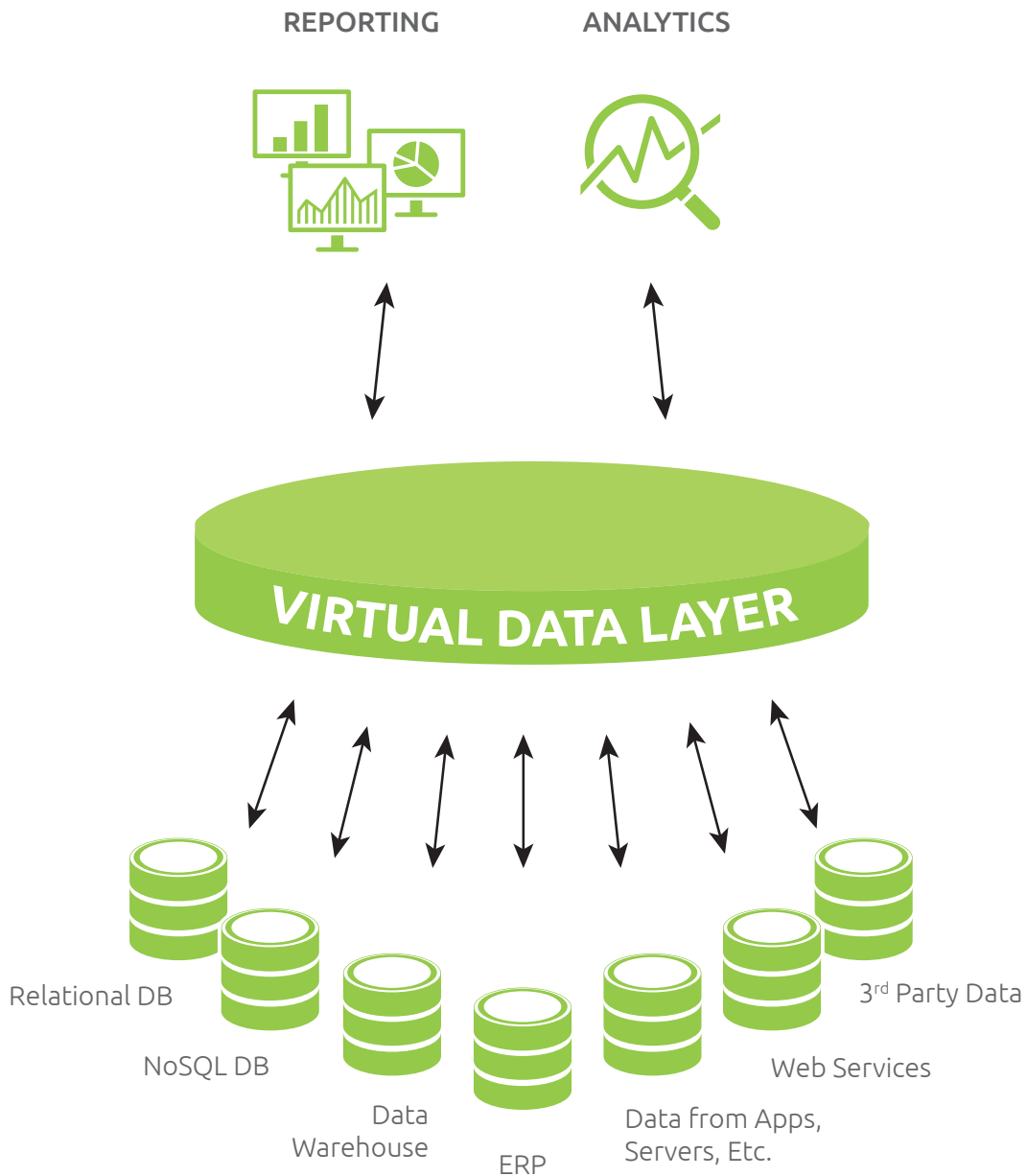
Figure 1

Graphic depiction of how data virtualization works.



This illustration shows the fundamental principle of data virtualization. Data from disparate sources in an organization is abstracted to a single virtual data layer. The layer effectively becomes a virtual database from which applications throughout the enterprise can access data.

When data virtualization is applied to reporting and analytics software the results are profound. Reports and analytics now draw from a single source, the virtual data layer, to access all of an organization's data. This offloads data integration requirements from costly and complex data warehousing solutions - they are no longer needed in order to consolidate data sources for access by the reporting and analytics software. With data virtualization there is no need to move or replicate source data since it is accessed directly via the virtual data layer. The following image shows how reporting and analytics software accesses the virtual data layer to retrieve data from the underlying data sources.



THE BENEFITS

There are many benefits to be gained from building reporting and analytics software on top of a virtual data layer. These include the following:

- Reports and analytics can be created that draw upon data from across the organization. This means new reports and analysis can be mashed together from previously siloed data. This unlocks great value from a company's data.
- Offering end users self-serve capabilities is a natural offshoot when using data virtualization architecture. This means end users can create new reports and analytics or modify existing ones without involvement from IT. An organization empowers its end users while offloading work from IT.
- Reports and analysis can be built using real time data. The reason for this is that source data is accessed in real time through the virtual data layer. There are no intermediary steps required, such as moving or copying source data to a data warehouse, to prepare the data to be accessed by the reporting and analytics software.
- Strong security is a natural by-product as all queries from end users of the reporting and analytics software go through a single source, the virtual data layer. This means each user's access can be controlled in a fine or coarse grained way according to need.
- Modern reporting and analytics capabilities that complement a company's existing solutions can be delivered at an affordable price.

USE CASE

A large medical billing company grew through acquisition. It ended up having 3,000 health care service providers as customers and serviced medical records for 14 million Americans. It had five legacy billing systems and 3,000 databases. The Company analyzed and managed its business from 6,000 custom reports.

Accur8 Software first used its data virtualization technology to build a virtual database that provided easy access to all 3,000 underlying databases. This dramatically reduced the data warehousing requirements the Company needed to support its reporting and analytics software. Accur8 then modified its reporting and analytics solution to the exact needs of its customer. This included creating 25 template reports that could be easily reconfigured and modified by the Company's 250+ end users to their individual needs (effectively replacing the 6,000 custom reports).

Of even greater value to the business, after the initial set up, end users were able to create and modify reports and analytics on their own without any involvement from Accur8. The IT staff required to service the needs of its 250+ end users was reduced from five staff to one with the four redundant developers redeployed to other tasks.

Accur8 Software

Accur8 Software is a leading data unification company, focused on high performance, scalable and accessibly priced integration technology and tools. We recognize that companies' application environments are growing in complexity as they deploy more and more software applications to drive their businesses forward. This complexity hampers business performance because valuable data from across the company is not readily available to business users or systems. It forces IT staff to waste significant time and money dealing with the never-ending cycle of trying to integrate and share needed data across the organization.

The Accur8 Integration Engine is a data unification tool designed to help companies address the issue of complex application environments. It provides a flexible, agile way to unify data across processes and applications without coding. This means being able to integrate data and applications together whether they are in-cloud, on-premise or separated by geographical distance. It allows companies to access data and have it flow across the organization to users and systems as needed. Its capabilities include data integration, application integration, master data management, and reporting and analytics. It can be deployed as a point solution to integrate data between two applications or as a tool to unify all of a company's data and applications.

We have customers ranging from growth stage to Fortune 150.

Accur8 Software is one of CIO Review's Top 20 Most Promising Data Integration Providers for 2017.

For more information please visit our website at www accur8software.com or send an email to info@ accur8software.com

(1) Techopedia, <https://www.techopedia.com/definition/28008/application-management-am>