

# AAA Uses Virtualized Data to Implement New Organizational Structure and Deliver Flexible Information Architecture



[www.aaa.com](http://www.aaa.com)

## Industry

Business services – Auto, Travel Services, Insurance and Financial

## Profile

AAA of Northern CA, NV, and UT, is the second-largest regional member club of the national organization AAA and serves more than 4 million Members in over 80+ branch offices in Northern California, Nevada and Utah. The AAA Emergency Road Service responds to almost 30 million distress calls from members nationally. They also sell insurance, offer vacation packages and provide discounts on hotels, cruises, flights etc. AAA also publishes and distributes millions of maps, tour books and other auto and travel publications each year.

**“Data virtualization has been amazing in that it has given us faster and easier ways to do things”**

Masha Bykin  
Data Development Lead,  
AAA NCNU

## The Need

AAA of Northern CA, NV, and UT recently reorganized its operations to create a for-profit Insurance division and a not-for-profit Auto division (or Auto Club). While the Auto Club put in place its data center, integration platforms and applications, it shared IT resources with the Insurance division so as to keep its operational applications, like reporting tools, call centers working as usual. So, the company was looking for a way to create an abstraction layer that deployed quickly and continued to feed the operational applications while migration continued under the hood.

From a strategic perspective, as they were building their IT infrastructure from the ground up, AAA wanted to infuse flexibility and agility into the architecture that will allow them to introduce future changes at the source, target or middleware layer without disrupting existing workflows.

## The Solution

*“It was very easy to get our team up to speed and function productively with Denodo.”*

After a 90 day POC, AAA selected the Denodo Platform for data virtualization because it met their short term and long term requirements. While it enabled an easy IT systems migration in the short term, it also provided the flexibility and agility to the AAA architecture which is important in the long term.

The unified virtual data layer enabled by data virtualization enabled IT systems transition at AAA because it abstracted data consuming applications from changes occurring in the underlying sources during the migration process. Data virtualization could connect to the disparate data sources, like databases, flat files, spreadsheets which were spread across multiple data centers and publish required data in various formats to analytical applications like Microstrategy as well as transactional applications or SOA entities. Processes in virtual layer could be designed or modified very quickly (hours vs. weeks) which allowed AAA to put data flows that kept the operational applications like reporting tools working without disruptions. Data virtualization also provided optimization and security features that enabled AAA to handle large volumes of data and enforce the necessary security restrictions on accessing entities.

## Use cases and benefits

*“Data virtualization has definitely met our expectations with our initial set of use cases, but also opened up options in new IT areas.”*

### Feeding Batch Processes

AAA faced challenges with its Informatica ETL processes during the process of migration because they constantly had to be modified as the source layout or format changed. This repeated retooling of ETL processes was costly from a time and maintenance resources standpoint. So, the Denodo Platform was used to pull all source data into a unified virtual layer and present it as a virtual source that fed the ETL processes. Changes at the sources level did not impact the virtual layer and saved the effort of modifying the ETL processes.

### Enabling Business Intelligence

During the process of migration, AAA was also shifting from SQL server to using Oracle as their relational database system. So, they didn’t want to develop ETL workflows over SQL server as they had to be replicated again when Oracle was deployed. So, they used the Denodo Platform to connect to the SQL server databases across data centers, perform the necessary transforms and publish this data in a JDBC/ODBC format for Microstrategy to consume. This process was deployed very quickly and provided the added advantage of flexible delivery in scheduled, real-time and cached formats to the tool as and when required.

### Semi-Structured Data Integration

Information on AAA's publications accessed in their offices was recorded in a spreadsheet and used for reporting. The spreadsheet data was moved into a SQL server database from where a desktop application pulled the required data for reports. Developing and maintaining this process took up considerable resources in the form of support teams and DBAs. This process was simplified using data virtualization because the platform connected to the spreadsheet and published the required information in the right format to the desktop application. This process was developed in deployed in a matter of days and reduced costs because the database and DBA involvement was no longer required.

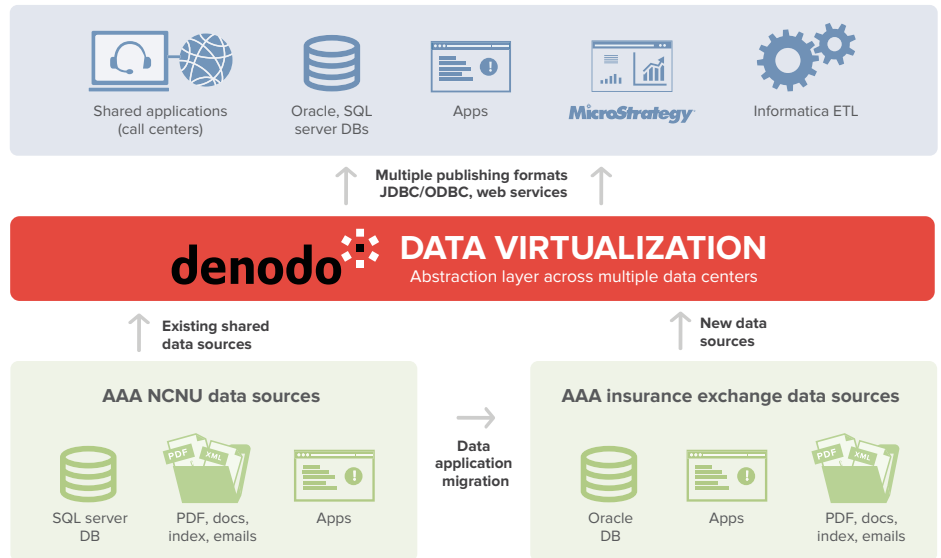


Figure 1: Data virtualization provides a virtual buffer layer to feed applications

### Next steps

In the future, AAA plans to continue to expand the use of the Denodo Platform for data virtualization in tactical use cases like building a single customer view and feeding transactional processes like allowing customers to perform self-service operations on their website. From a strategic perspective, the company plans to evolve data virtualization to be an enterprise wide data provisioning layer feeding both analytical and transactional applications. As a lot of these applications source the same data, this will reduce redundant processes and save development and maintenance costs. In the long term, the data virtualization, the Denodo Platform will provide AAA's enterprise architecture with the flexibility and agility to manage changing business and market needs.

### About Denodo

Denodo is a leader in data management. The award-winning Denodo Platform is the leading data integration, management, and delivery platform using a logical approach to enable self-service BI, data science, hybrid/multi-cloud data integration, and enterprise data services. Realizing more than 400% ROI and millions of dollars in benefits, Denodo's customers across large enterprises and mid-market companies in 30+ industries have received payback in less than 6 months.