



## DENODO DATA VIRTUALIZATION ABSTRACTION LAYER

“Denodo enhances its data source connectivity offering with certified support for Hortonworks Data Platform, a leader in Apache Hadoop for the Enterprise. Together Denodo Data Virtualization and Hortonworks will help customers to achieve the maximum benefits of their Big Data initiatives.”

Daniel Fernandez  
Director, Denodo Labs

Denodo Data Virtualization offers a data abstraction layer over Hadoop, NoSQL and traditional enterprise repositories, allowing them to coexist seamlessly, avoiding IT professionals being afraid of creating “yet another silo” when deploying Big Data solutions. Traditional reporting tools can execute reports through the Denodo Data Virtualization layer with combined data coming from Hadoop, NoSQL and enterprise repositories using SQL queries. Data Virtualization enables therefore an evolutionary adoption of Big Data in the Enterprise.

Denodo Data Virtualization allows creating “virtual data marts”, i.e. a collection of virtual views, with information scattered across data warehouses, operational systems (including the Cloud), Hadoop and enterprise repositories. Abstracting data consumers of this complexity in formats, access methods and protocols through Data Virtualization is crucial to achieve the maximum benefit of Big Data initiatives.

### WHAT BUSINESS CHALLENGES ARE SOLVED?

#### Faster Time to Insights

With Data Virtualization the solution is a matter of days/weeks. No need to learn complex query languages. Your business users will be able to benefit from combined reports with better insights with data coming both from traditional BI repositories and Hadoop.

#### Better Performance & Scalability

Denodo combines real-time query optimization techniques and intelligent caching to provide a high throughput architecture, making the most of Big Data computing platforms. Queries are delegated to Hadoop whenever possible to achieve the highest performance.

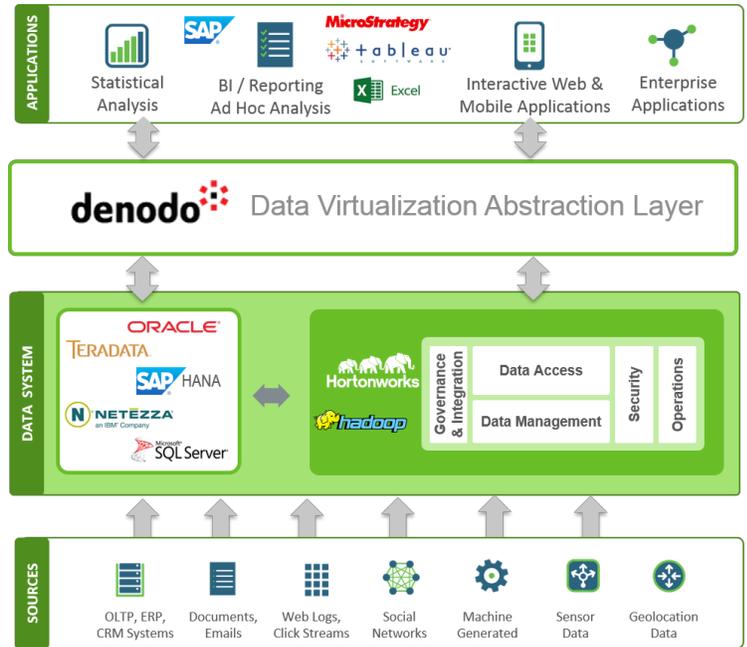
#### Better ROA

With Data Virtualization enabled you will be able to support more sources (e.g. new NoSQL repositories) and expose data to more consumers (e.g. through RESTful), enhancing the overall ROA (Return on Assets) of your BI solution.

## DENODO IN THE MODERN DATA ARCHITECTURE

### Features & Benefits of the Combined Solution

- Common Business Canonical model defined in the Data Virtualization layer.
- Query federation over Hadoop Hortonworks and other repositories with high-performance.
- Real-time and cached access.
- A pure relational model is exposed to the consuming applications that can get access to Denodo via SQL queries (JDBC/ODBC, ADO.NET, SOAP WS, RESTful WS, Widgets).
- Denodo integration with Hadoop Hortonworks comprises:
  - Denodo Map/Reduce Connector for execution of MapReduce, YARN, PIG or Hadoop Streaming tasks. Long running jobs are executed asynchronously from an SSH connector, results are later read from HDFS files.
  - Denodo Hive connector.
  - Denodo HBase connector.
  - Denodo HDFS/WebHDFS connector: allows access to sequence files, maps files, key/value files and Avro files.
  - Kerberos authentication.



## DENODO IS A CERTIFIED TECHNOLOGY PARTNER

The Hortonworks Certified Technology Program reviews and certifies technologies for architectural best practices, validated against a comprehensive suite of integration test cases, benchmarked for scale under varied workloads and comprehensively documented.



## About Hortonworks

Hortonworks is a leading innovator at creating, distributing and supporting enterprise-ready open data platforms. Our mission is to manage the world's data. We have a single-minded focus on driving innovation in open source communities such as Apache Hadoop, NiFi, and Spark. Our open Connected Data Platforms power Modern Data Applications that deliver actionable intelligence from all data: data-in-motion and data-at-rest. Along with our 1600+ partners, we provide the expertise, training and services that allows our customers to unlock the transformational value of data across any line of business. We are Powering the Future of Data™.

### Contact

For further information visit  
<http://hortonworks.com>

+1 408 675-0983  
 +1 855 8-HORTON  
 INTL: +44 (0) 20 3826 1405

Denodo  
[www.denodo.com](http://www.denodo.com)  
 +1 877 556 2531 (US & Canada)  
 +44 (0) 20 7869 8053 (EMEA)

