



OrgSpire and Denodo

Facilitating Compliance with the California Consumer Protections Act of 2018 (CCPA)

Data privacy is a global concern, and each locality has its own set of laws to protect it. In the United States, in California, it is protected by the California Consumer Protections Act of 2018 (CCPA), which went into effect on the first day of 2020.

The CCPA grants these four rights to California consumers, and all companies with California customers will be required to honor them:

- To request that a business discloses the information that it collects about the consumer, including the sources of all information, and the parties to which the information was sold.
- To request that a business delete any personal information about the consumer that the consumer chooses.
- To opt out of activities that involve the selling of the consumer's information, along with protection against any discrimination that may result from their opting out.
- To expect, if they are under 16 years of age, that their personal information will not be sold.

Honoring these demands, in compliance with the CCPA, can be extremely challenging for many organizations. For example, to furnish a report on the origin of a particular data point can be daunting if the data was drawn from multiple sources, some of which may be on-premises, while others may be in the cloud. Many organizations do not keep detailed records of data lineage, or they might not have effective data governance in place to easily control who can access which information.

To comply with the CCPA in a seamless manner, quickly and effectively responding to consumers' requests on behalf of their personal data, companies would need a comprehensive view across all of their diverse data holdings, as well as a way to establish security and governance protocols from a single point of control. They also need guidance in understanding how best to leverage technology in maintaining CCPA compliance.

Solution Overview

The **Denodo Platform** offers the broadest access to structured and unstructured data residing in enterprise, big data, and cloud sources, in both batch and real-time, exceeding the performance needs of data-intensive organizations for both analytical and operational use cases, delivered in a much shorter timeframe than traditional data integration tools.

OrgSpire offers a team of experts that help organizations to gain and understand a comprehensive view of all of their data related to individual consumers. Leveraging the Denodo Platform, OrgSpire assists organizations in setting up structures for centrally managing security and governance.

Data Virtualization for CCPA Compliance

Data virtualization provides 3 critical elements that facilitate CCPA compliance:

1. A seamless view across all data sources
2. Detailed lineage about all data
3. Security and governance control over all data holdings from a single point

Data virtualization is a data integration technology, but rather than physically moving data from multiple sources into a new, consolidated repository, data virtualization provides a real-time view across all sources, leaving the source data exactly where it is.

Because data virtualization enables a unified data access layer across an organization's myriad data sources, it also enables an organization to use this unified data layer to manage security and governance from a single point.

With its unique architecture, data virtualization enables:

- **Fine-grained Security and Complete Auditability.** Data virtualization delivers secure, virtualized views of the data to the consumer, in real time. These views are traceable and auditable, and will only be delivered to authorized consumers. With data virtualization, companies can rapidly reply with consumer requests for tracing, reporting on, or deleting personal data.
- **The Elimination of Unnecessary Data Movement.** With data virtualization, no data needs to be replicated for reporting purposes. For CCPA compliance, this means that companies can reduce the inherent risks involved with maintaining multiple copies of the same personal information.
- **Complete Data Lineage and Agile Business Rules.** Companies can understand, and report on, the full lineage of any sensitive data set, including its original source, any views, and any modifications. Companies can also mask data on the fly, so it cannot be viewed by unauthorized users. Such rules can be applied quickly and effectively across diverse systems.
- **Secures Data-at-rest and Data-in-motion.** The data virtualization layer can perform role-based authentication at any level, secures data in transit via SSL/TLS protocols, and authenticates users via industry proven protocols.

What Denodo Brings

Denodo produces the award-winning Denodo Platform, the industry's most advanced data virtualization that has earned Denodo a place in the Leadership quadrant of Gartner's Magic Quadrant for Data Integration Tools. The Denodo Platform's full-featured data catalog enables organizations to quickly and easily view history and lineage across diverse data sources, and also to view associations and relationships in the data, search with search-engine-like responsiveness, and see and manage all privacy controls for an individual consumers or a group.

Denodo Platform Benefits

- Access the most up-to-date data through real-time access to data sources
- No need to replicate unnecessary copies of personal data in various systems
- Combine on-premises data with cloud data, through the same governed virtual layer
- Audit and monitor data usage, with logs of which users view which data
- Capture the full data lineage, including the original sources for all data
- Mask data on-the-fly, across the enterprise
- Manage security controls via a single access point

With a data virtualization layer powered by the Denodo Platform, companies can:

- Apply a cost-benefit-based approach to data privacy and security
- Leverage data privacy and security to drive superior customer experiences
- Consistently manage privacy and security, applied via a single control point
- Easily instill data privacy and security into new initiatives that require information access

What OrgSpire Brings

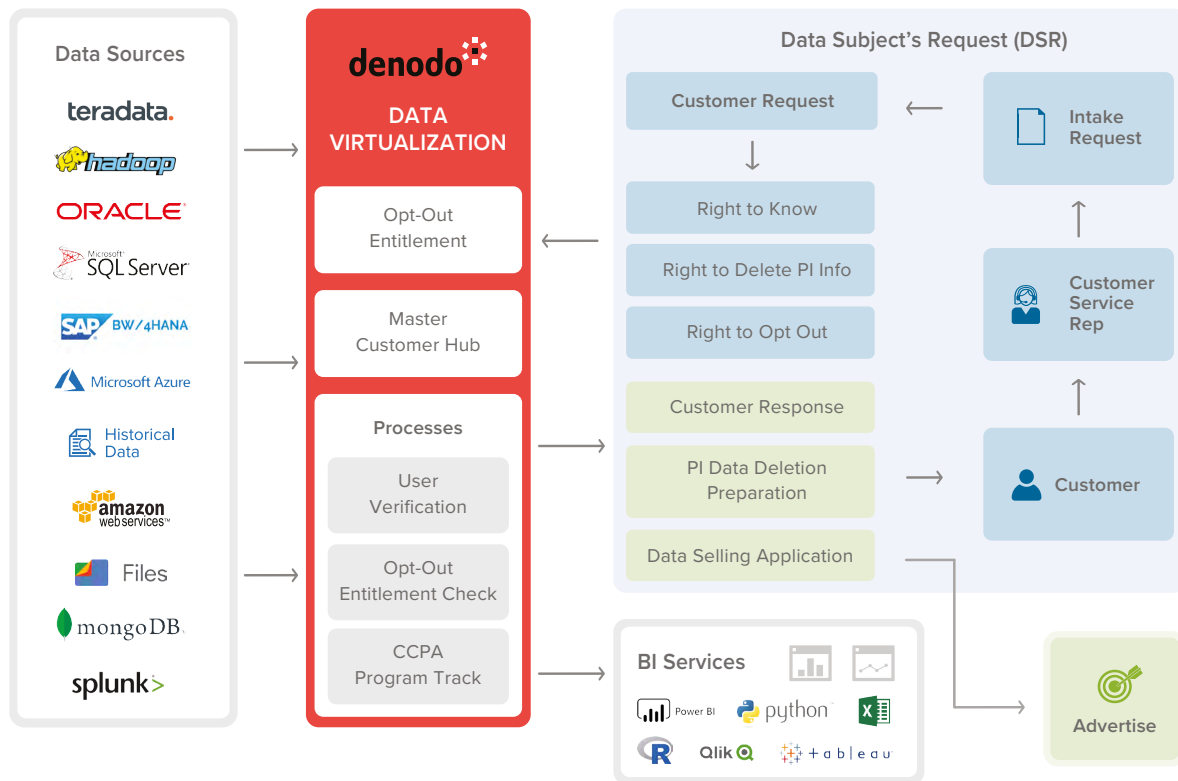
Whereas Denodo brings the technology, OrgSpire brings the team. OrgSpire experts work with each organization to help them gain and understand a comprehensive view of all of their data related to individual consumers. From there, OrgSpire assists organizations in setting up structures for centrally managing security and governance. Leveraging the Denodo Platform, OrgSpire helps organizations to quickly and easily comply with CCPA without having to implement new hardware or rebuild existing systems from the ground up.

Case Study: One Company's Story

A U.S.-based retailer with millions of customers wanted to modernize its infrastructure to include cloud-based analytics, but it faced strict restrictions on migrating personally identifiable information (PII), and needed to maintain compliance with the CCPA. The company's customer transaction data was scattered across multiple data warehouses, disparate data sources, cloud data sources, and a few No-SQL databases. The company also needed to centralize security management companywide, around a single point of control.

Leveraging the Denodo Platform, the company set up a data virtualization layer that runs on an Amazon Web Services (AWS) instance in the cloud. The Denodo Platform facilitates the company's ability to comply with CCPA, helping the company to provide the information to requesting consumers in a timely manner. The Denodo Platform seamlessly integrated all of the company's disparate data sources and presented a user friendly interface that enabled stakeholders to easily search for, and find, any needed user data, including PI information, transactions, activities, and account information, all in real time, and all without requiring any data to be physically moved. The Denodo Platform enables data to be published as a service in any desired format, such as REST API, SOAP, JDBC, ODBC, or CSV, for any front-line applications or interfaces.

CCPA Solution using DV framework



After implementing the data virtualization layer, the company was able to:

- Easily meet CCPA requirements
- Control security across the entire infrastructure from a single access point
- Perform complete audits of data access, as needed
- Quickly and easily add new, compliant data sources
- Save replication costs while avoiding the need to replicate customer data unnecessarily, for CCPA compliance
- Save implementation time and cost over competing solutions

About OrgSpire

OrgSpire, Inc is a reputable consulting group based out of San Ramon, California. We are focused on providing the best quality, most cost-effective business and technology solutions to companies across a broad range of market segments, including banking, mortgage, finance, telecom, retail, biotechnology, and pharmaceutical. OrgSpire understands the uniqueness and challenges of the industries we deal with, and we deliver services best suited for our client's requirements. We take on new challenges wholeheartedly to expand our areas of expertise. Our technology solutions provide powerful insight and assist in solving our clients' critical issues. This would be impossible to implement without a passionate, customer-oriented team. Hence we engage a matrix of technology, domain expertise and highly skilled people to provide the best possible solutions for our clients. We are fully aware of the trust our clients place in us and we reflect that in everything we do.

For more information visit www.orgspire.com

About Denodo

Denodo is the leader in data virtualization providing agile, high performance data integration, data abstraction, and real-time data services across the broadest range of enterprise, cloud, big data, and unstructured data sources at half the cost of traditional approaches. Denodo's customers across every major industry have gained significant business agility and ROI by enabling faster and easier access to unified business information for agile BI, big data analytics, Web, cloud integration, single-view applications, and enterprise data services. Denodo is well-funded, profitable, and privately held.

For more information, visit www.denodo.com