



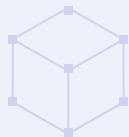
INDUSTRY

Real Estate

PROFILE

Founded in 1983, Prologis provides efficient logistics real estate solutions to the world. With 1,600 employees in 19 countries, Prologis collaborates with customers to achieve operational efficiencies, reduce environmental impacts, and improve communities. The company manages over \$111 billion in assets, representing over 797 million square feet across 19 countries.

TECH PARTNERS



“The speed of business is faster than before. It is now critical to be able to make decisions on a dime to pivot the business in its needed direction. This is why Prologis went with the Denodo Platform.”

Luke Slotwinski, VP, IT Data and Analytics at Prologis

Prologis Leverages the Denodo Platform and Snowflake to Modernize and Accelerate Analytics

Prologis manages a wide breadth of real estate assets across the globe, which translates into a staggering amount of data in a variety of languages and stored in a variety of geographically dispersed sources. Every day, Prologis needs to integrate this vast amount of data to operate its business effectively.

Business Need

For many years, Prologis managed its data via a global, on-premises data warehouse comprised of 27 servers supporting a series of databases, integration servers, and reporting servers. Dedicated systems captured changed data from source systems and sent it to the data warehouse. The primary vehicle for moving source data to the data warehouse was a set of ETL servers.

Prologis became aware of the infrastructure’s disadvantages. ETL scripts need to be rewritten and re-tested whenever there is a change in the source environment. “Six years ago, this was modern technology, but we began to outgrow it,” says Luke Slotwinski, VP, IT Data and Analytics at Prologis. “Migrations were all-day events that required the entire team, just to make sure that we could push monolithic data sets through our dev, test, and production environments. And with every test, we needed to do a complete regression test of the entire stack, to make sure that nothing broke.”

Prologis wanted to modernize its data infrastructure to include cloud capabilities, as well as to introduce efficiencies that would accelerate analytics. However, Prologis would not engage in modernization efforts that would cause undue downtime resulting from interruptions to the existing system.

The Solution

For the critical cloud component, Prologis implemented a Snowflake cloud-based data warehouse alongside its existing on-premises data warehouse. “Unlike some competing solutions, which go into read-only mode when they scale, and then come back online after duplicating the data to the new node, Snowflake truly decouples storage and compute,” says Slotwinski. “We can scale Snowflake on demand, based on the query we’re about to run, and then shrink it right back down again without waiting for the compute resources to scale.” In addition, Snowflake seamlessly accommodates both structured and semi-structured data.

To further enhance its data infrastructure, Prologis leveraged the Denodo Platform, which uses data virtualization to integrate data in real time from myriad disparate data sources without replicating data to a new consolidated repository. The Denodo Platform acts as an intelligent data-access layer between data sources and data consumers, abstracting data consumers from the complexities of access. This enabled Prologis to establish a logical data warehouse architecture that provides real-time access to data across on-premises, cloud, and other sources. Because the Denodo Platform is a unified data access layer, it facilitates the implementation of global governance provisions, including standard definitions and nomenclatures, as well as security protocols, across the diverse data sources comprising the Prologis global enterprise. This also enabled a seamless migration to Snowflake without impacting business operations.

Finally, Prologis stakeholders took full advantage of the fact that Denodo Platform's data catalog lists all available data assets in a single location, and also delivers the listed data on-demand. Using this catalog, Prologis was able to implement a higher level of diligence in data management, providing standard definitions for every column and every view, as well as detailed documentation for every object.

Benefits

Prologis appreciated the ease with which the Denodo Platform enabled a smooth transition to Snowflake. "While the migration was taking place," explains Slotwinski, "Users and reporting tools were talking to the Denodo Platform, while behind the scenes, our team was biting chunks away from our old architecture and putting those chunks into the new architecture, seamlessly moving down that path."

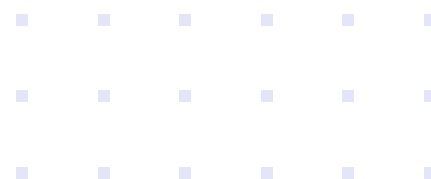
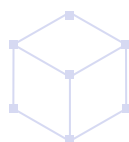
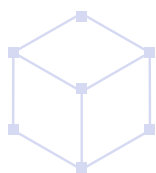
Once the migration was complete, and Prologis implemented a logical data warehouse configuration, the company began to appreciate the Denodo Platform's ability to accelerate analytics. "Before, for a new table that we've never analyzed before, we needed to dedicate a sprint to get the ETL set up to get the data into a database so we could start analyzing it," says Slotwinski. "Now, we can virtualize that table, and immediately start doing analytics on it." Prologis also leveraged the query push-down capabilities of the Denodo Platform to push key workloads to Snowflake, for substantial performance improvements on larger data sets.

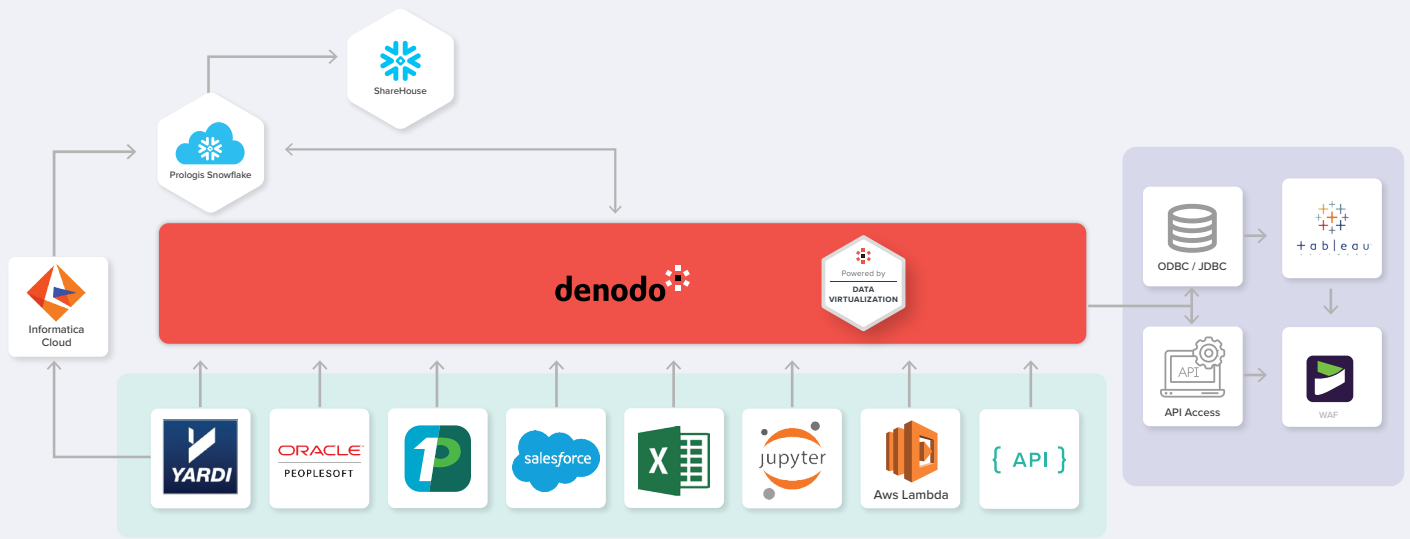
Prologis went on to find ways to leverage the Denodo Platform for efficiencies to further accelerate analytics. Prologis identified key "analytics building blocks," reusable components to support a broad array of analytics use cases, and leveraged the Denodo Platform to provide seamless access to these. **Slotwinski estimates that this accelerated analytics activities by as much as 30%.**

“

With the Denodo Platform and Snowflake, we have the best of both worlds,” says Slotwinski. “We can ingest semi-structured data without worrying about the schema, and just throw it into Snowflake. Then, when we need to create a curated layer of that data for our data lake, the Denodo Platform solves that part of the puzzle. We get the performance and flexibility of Snowflake combined with the unified data access layer provided by the Denodo Platform.”

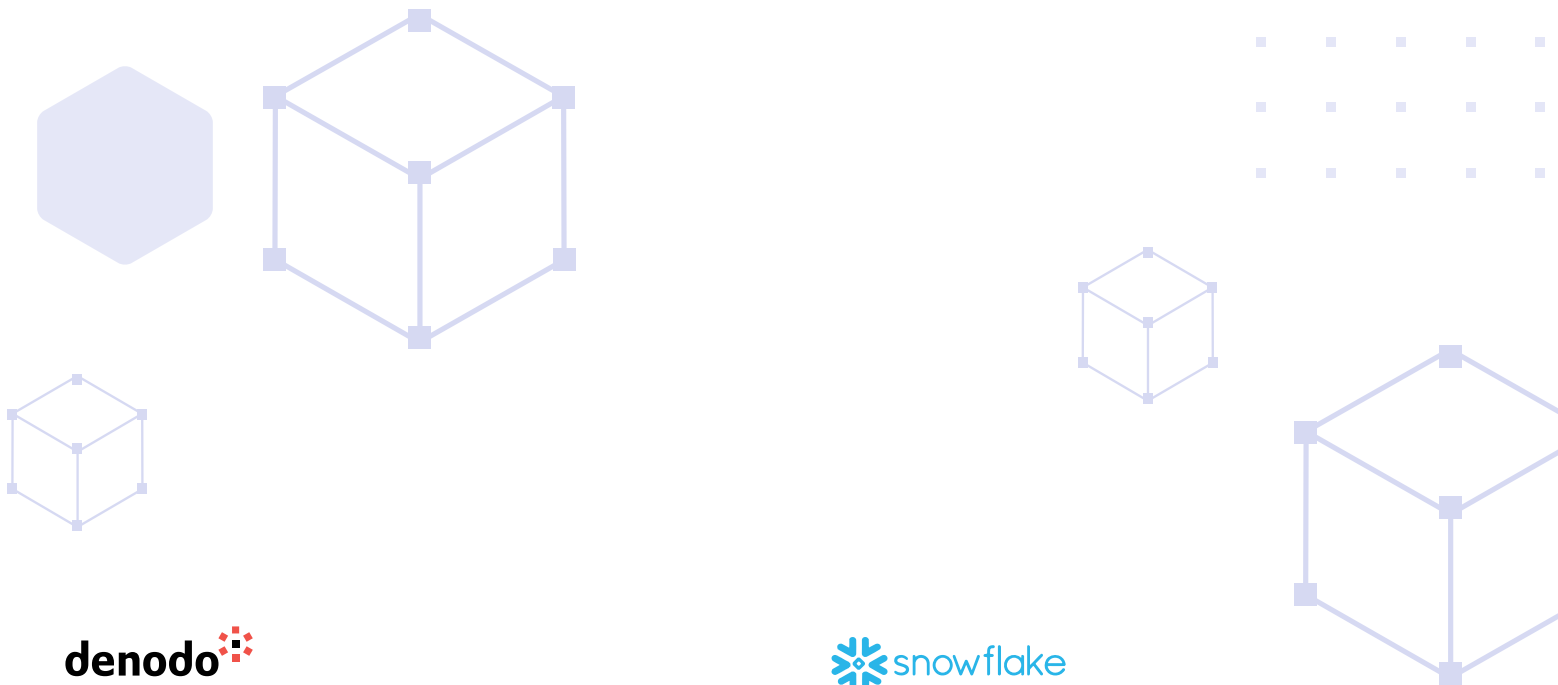
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Supported by the Denodo Platform, Prologis was able to:

- Provide a seamless transition to the cloud
- Take full advantage of the capabilities of the Snowflake cloud-based data warehouse
- Enable a much more flexible infrastructure for uninterrupted maintenance and modernization activities
- Streamline and accelerate data access in support of analytics
- Facilitate the implementation of global governance and security provisions
- Leverage a comprehensive data catalog that also delivers data
- Maintain consistent terminology and definitions across the entire infrastructure



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.

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Snowflake is the only data warehouse built for the cloud, enabling the data-driven enterprise with instant elasticity, secure data sharing, and per-second pricing across multiple clouds. Snowflake combines the power of data warehousing, the flexibility of big data platforms, and the elasticity of the cloud at a fraction of the cost of traditional solutions. Snowflake: Your data, no limits.

Find out more at snowflake.com.