CASE STUDY

ABC Supply delivers self-service analytics using Dremio to organize domain data and accelerate development

At a Glance

The Customer

ABC Supply Co. inc.

Challenge

ABC Supply faced significant challenges with scalability and performance in their data management systems, as direct connections between Tableau and Snowflake resulted in slowness, timeouts, and frequent failures with large data extracts. Additionally, the lack of a consistent, metadata-driven process for managing data pipelines created bottlenecks, increasing dependency on the data engineering team for dashboard development and modifications.

Solution

ABC Supply implemented Dremio to connect Tableau, improving performance and eliminating issues like slowness and timeouts. They also developed a metadata-driven process for managing data pipelines, which reduced dependency on the data engineering team and ensured consistent creation of enterprise data sets.

Results

ABC was able to optimize cost and workload on Snowflake with Dremio to improve performance and enable self-service analytics. Additionally, business users were empowered to explore data independently through Dremio's Semantic Layer, promoting collaboration and strengthening data governance practices.

The Business

ABC Supply is the largest wholesale distributor of roofing materials in North America and a key distributor of siding, windows, and other exterior and interior building products. Founded in 1982 and headquartered in Beloit, Wisconsin, the company is dedicated to serving professional contractors with a broad product range, excellent service, and strong values of respect and teamwork. ABC Supply operates over 800 locations nationwide and continues to grow, driven by a commitment to helping contractors build their businesses and achieve success.

The Challenge

ABC Supply faced significant challenges with scalability and performance in their data management systems. The direct connection between Tableau and Snowflake resulted in slowness, timeouts, and lost connections, complicating the management of large multi-year data extracts and causing frequent failures. This situation led to a dependency on the data engineering team for any new or modified Tableau dashboards, creating bottlenecks and slowing down development.

Additionally, the lack of a consistent, efficient, and metadata-driven process for managing data pipelines made it difficult to ensure the creation and maintenance of enterprise data sets. There was also a need for better organization and accessibility of data, as well as a centralized repository for shareable code to avoid duplication and ensure consistency across various dashboards and reports. These challenges hindered ABC Supply's ability to effectively manage and utilize their data to support growth and decision-making.
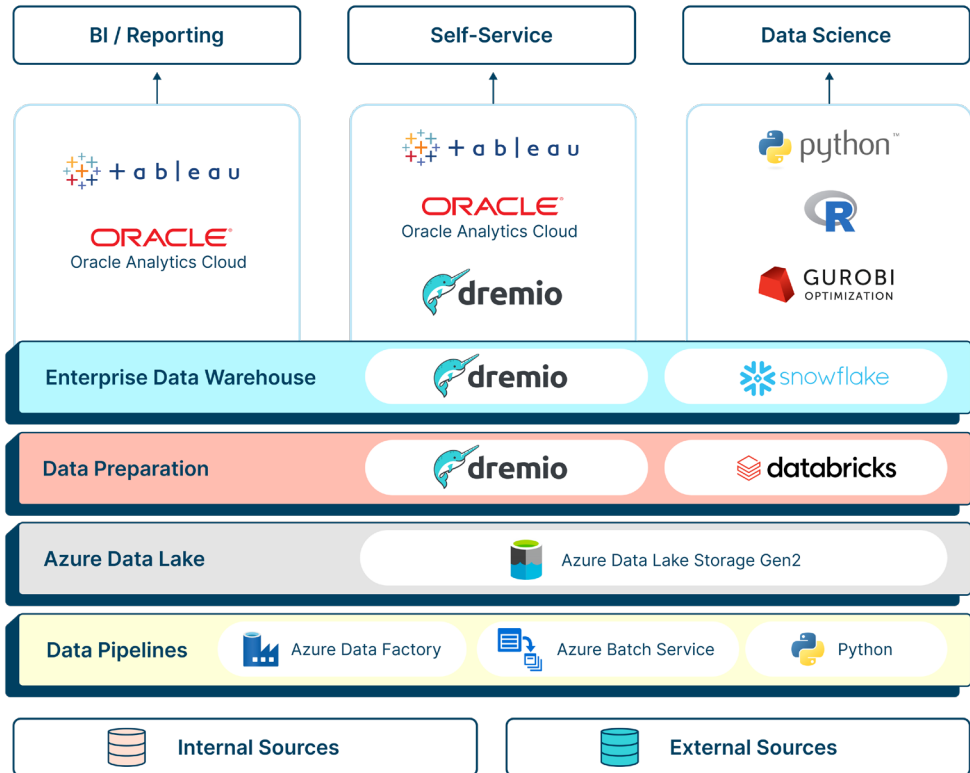
The Solution

To solve these challenges, ABC Supply implemented a more robust data architecture that included the introduction of Dremio. This platform improved data management by organizing data into domains and providing a centralized repository for shareable code, which enhanced consistency across dashboards and reports. By connecting Tableau to Dremio instead of directly to Snowflake, they addressed performance issues, eliminating slowness, timeouts, and lost connections.

Additionally, ABC Supply developed a metadata-driven process to manage their data pipelines, ensuring efficient and consistent creation of

enterprise data sets. This approach reduced their dependency on the data engineering team, allowing BI developers and business analysts to access well-organized data more independently and efficiently. These solutions streamlined data management, improved performance, and supported ABC Supply's continued growth and data-driven decision-making.

Results

The implementation of this solution led to several positive results for ABC Supply. Firstly, connecting Tableau to Dremio significantly improved performance, eliminating issues like slowness, timeouts, and lost connections. This allowed for more reliable and efficient data management, particularly with large multi-year data extracts.

Secondly, the metadata-driven process for managing data pipelines ensured the efficient and consistent creation of enterprise data sets. This reduced the dependency on the data engineering team, accelerating the development of new dashboards and modifications to existing ones. Consequently, BI developers and business analysts gained easier and more independent access to well-organized data, enhancing their ability to perform ad hoc queries and make data-driven decisions. Overall, these improvements streamlined data management processes and supported ABC Supply's continued growth and operational efficiency.

Conclusion

ABC Supply created a centralized location to find all of the data needed for the various dashboards across data domains thanks to Dremio. They accomplished this with Dremio Spaces, allowing them to organize all of the domain-related data into virtual data sets by domain. Because of this, ABC Supply achieved their goal of creating a robust enterprise data set, which is analytics ready with all the business requirements that are in there and provide reporting across enterprise