

CASE STUDY:

Reducing Time to Deliver Client Results from Months to Weeks

Overview

Ad Astra is higher education's solution partner in managing the academic enterprise. Partnering with more than 500 colleges, universities, and systems nationwide, Ad Astra helps improve stewardship of instructional resources, streamline student access to courses, and accelerate student completions. Their goal is to help colleges and universities graduate more students faster.

To help schools and students together, Ad Astra pulls large volumes of data from multiple student information systems. This ERP holds 90% or more data for a school, including information on students and instructors, classes, student history, and financial information. When college deans and other staff start building class schedules at the beginning of a semester, there are countless times when they run into bugs within the ERP, which require lengthy SLAs (usually months at a time) to fix, causing a rippling effect that would eventually impact students. They needed a reliable way to solve these data ingestion challenges so students and the educational institutions could better engage with one another.

Challenge

Ad Astra designated several internal teams to try and tackle their data ingestion challenges in-house. They first tried to pull all the data themselves from the disparate systems instead of trying to transform it, which led Ad Astra to create their own data ingestion agent. This solution allowed the company to move



data successfully into Amazon S3. However, the development teams had to focus primarily on major student information systems (representing 80% of Ad Astra's clients) instead of all systems simultaneously.

This left around 20% of Ad Astra's customers unaccounted for and pushed Ad Astra into the data ingestion business — not core to their mission of providing software to higher education. As a result, the organization knew it had to adopt a solution like StreamSets to handle its data integration so it could focus on helping students graduate faster.

Solution

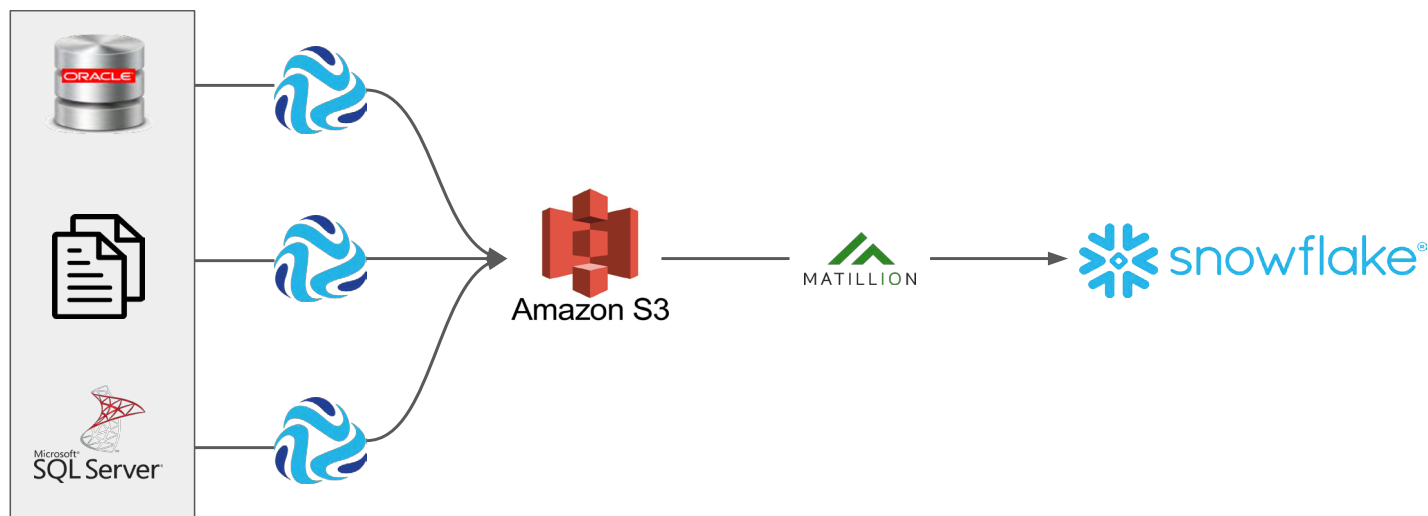
Ad Astra chose StreamSets Data Collector to ingest data from the disparate student information systems with pipelines going into separate Amazon S3 buckets and eventually into Snowflake. The organization can also write data back into the student information systems with pipelines created in StreamSets.

Furthermore, Ad Astra has some clients that have unique data requirements. For these cases, StreamSets allows Ad Astra to use runtime parameters to move data into the right table at the right time, eliminating the need to make additional changes when client data reaches the transformation stage.

Lastly, StreamSets provides Ad Astra's developers with one basic common data set and one schema to code against, enabling the organization to become more agile when responding to bug fixes.

Simplifying Data Ingestion With StreamSets

Oracle and Microsoft SQL Server represent separate Student Information Systems



Results

The StreamSets platform has allowed Ad Astra to continue focusing on higher education by providing an efficient means to ingest data, simplify their overall data operations, and reduce the burden placed on their development teams. Since Ad Astra implemented StreamSets, it has reduced maintenance on dozens of separate XML files down to four basic pipelines that run hundreds of jobs for their clients.

Implementation time for new clients has dropped from months to days, and their ability to start gathering, analyzing, and getting recommendations/results back to clients has been cut from being almost as long as a year to just a few weeks. By implementing StreamSets, Ad Astra has not only become more agile and increased customer value, but they can continue delivering on their top priority: to help students graduate faster.

About StreamSets

StreamSets, a Software AG company, eliminates data integration friction in complex hybrid and multi-cloud environments to keep pace with need-it-now business data demands. Our platform lets data teams unlock data—without ceding control—to enable a data-driven enterprise. Resilient and repeatable pipelines deliver analytics-ready data that improve real-time decision-making and reduce the costs and risks associated with data flow across an organization. That's why the largest companies in the world trust StreamSets to power millions of data pipelines for modern analytics, smart applications, and hybrid integration.

To learn more, visit www.streamsets.com and follow us on [LinkedIn](#).