APTUS HEALTH

Aptus Health Automates Delivery of a Cloud-Based Data Vault to Tear Down Data Silos

Industry: Healthcare

Location: Boston, Massachusetts

Employees: More than 400

Solution: WhereScape® automation for Snowflake

Highlights:

- Replaced legacy, on-premises data warehouse and data silos with cloud-based data vault, centralizing data access and management

- Created first data vault design in WhereScape® Data Vault Express™ for Snowflake in three days

- Delivered first production release of cloud-based data vault in three months

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—**Alethea Granberg,** Senior Director of Product Development, Aptus Health

Founded in 2008, Aptus Health connects health and life sciences companies with healthcare professionals, healthcare consumers, and other members of the healthcare ecosystem. The company creates data-driven, multichannel marketing campaigns aimed at physicians and healthcare consumers through the many digital channels the company owns and operates.

Challenge: Break down silos to make data centrally available

With a digital network of healthcare professionals that serves more than one million doctors and a mobile network that reaches more than 100 million mobile users, Aptus collects an enormous amount of data. It combines this data with third-party and client information and uses the results to create the most personalized, contextually relevant campaigns possible for its life sciences clients.

Over the past decade, the company has grown dramatically, both organically and through acquisition. As each new acquisition was brought into the company, it created another set of data silos, each with its own data warehouse and reporting systems. Seamlessly integrating the new data within the 12-year-old legacy data warehouse environment to produce the analytics the business needed was a challenge.

"Our data warehouse environment was on premises, built for one particular legacy organization, and had virtually no documentation," says Steve Gordon, director of data warehousing at Aptus Health. "While we bolted data from various systems onto the existing structure, we were challenged to fulfill the analytic needs of the business in a timely way." Because of all the silos, there was no centralized availability of data across the company, no historical data available to identify trends over time and no master data management.

When attempting to address data warehouse integration challenges with a tool for extraction, transformation and loading (ETL) processes, Aptus Health discovered ETL was far too time-consuming, complex and prone to human error to be effective. In response, the data warehouse team began searching for a better way to develop data infrastructure quickly, landing on utilizing data warehouse automation and the cloud as a target data platform environment.

Solution: Automate the Data Vault lifecycle to accelerate time to value

What the company needed was a way to centralize its data, while achieving greater scalability, agility, and cost effectiveness. It decided to move its legacy data warehouse from an on-premises Microsoft SQL Server environment to Snowflake, a data warehouse solution built for the cloud. "In addition to the self-optimization, innovative platform, and AWS infrastructure that Snowflake offers, it was the only solution that separates the cost of storage from the computing costs," says Gordon. "Because our data warehouse is storage-heavy and CPU light, Snowflake pricing is extremely advantageous for us."

With that quick win of gaining scalability and computing power under its belt, the organization then began the task of creating a completely new, company-wide data warehouse. To create a new data warehouse that would be resilient to business and technology changes, Aptus decided to adopt the Data Vault 2.0 modeling method.

To accelerate the process, the data warehousing team turned to automation. It selected WhereScape® Data Vault Express™ for Snowflake to fast-track the design, development, deployment and operation of its new data vault. "We chose WhereScape Data Vault Express for its template-driven implementation, ease of use, ease of maintenance and automatic documentation," says Gordon.

For Alethea Granberg, senior director of product development at Aptus Health, automation was critical to the success of the new data vault. "Getting the opportunity to abandon an existing data warehouse and start over meant that we needed to show very rapid progress," she says. "Automation was the only way to accelerate the delivery of business value with the same size team."

With WhereScape, the data warehouse team rapidly created a new centralized data warehouse that moves data from source systems into a data vault. From there, the data goes into a business vault that includes the different business rules needed to support the organization. Then the data moves to various data marts for access by internal transactional systems, analytics teams and business intelligence tools.

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— **Steve Gordon,** Director of Data Warehousing, Aptus Health
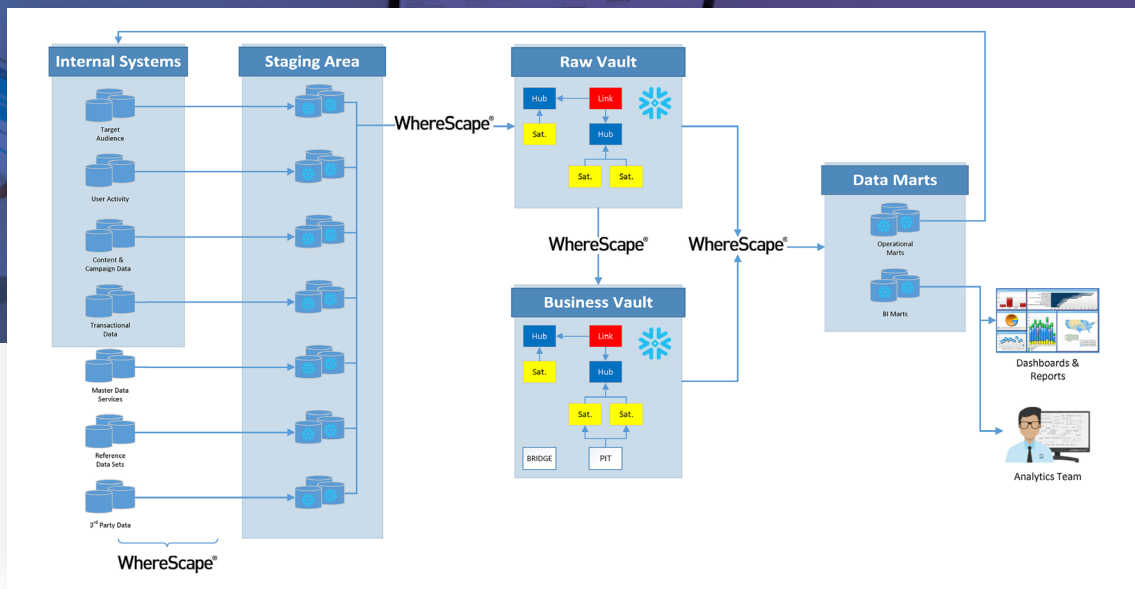
Aptus Health dramatically shortened the development lifecycle using WhereScape automation for Snowflake

Results: Rapid delivery of business-ready data infrastructure

Using WhereScape Data Vault Express, Aptus Health dramatically shortened the development lifecycle, creating its first Data Vault 2.0 model within three days and releasing its first data vault into production within three months. A first data mart went into operation a few months later.

Steve Gordon is thrilled with the productivity Aptus Health can achieve with WhereScape automation. "As software developers, we are often so busy delivering value for the business that we overlook ways to deliver value to ourselves," he says. "Through automation we've increased our productivity tremendously, and WhereScape has been a great partner for us."

Through the combination of WhereScape automation, Data Vault 2.0 and Snowflake cloud data warehousing, Aptus Health achieved the following project objectives:

• Central availability of data related to healthcare providers, eliminating discrepancies across applications

• An ability to efficiently answer business questions, including analysis of trends over time

• Data delivered in minutes and not days, with data marts updated near instantaneously

• Full documentation of the data warehouse including data lineage and transformations

• Extensibility for both U.S. and international data, with data logically integrated while remaining physically separated

For the business, access to centralized data ultimately means a better experience for all participants in the healthcare ecosystem. "We can now take information from all of our sources, including public sources and our own platforms and services, and centralize that information to understand who users are as individuals, how we can personalize the interactions, and how we can best optimize their experience," says Granberg.

About WhereScape

WhereScape helps IT organizations of all sizes leverage automation to design, develop, deploy, and operate data infrastructure faster. More than 700 customers worldwide rely on WhereScape automation to eliminate hand-coding and other repetitive, time-intensive aspects of data infrastructure projects to deliver data warehouses, vaults, lakes and marts in days or weeks rather than in months or years. WhereScape has global operations in the USA, UK, Singapore and New Zealand. www.wherescape.com

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