

Case Study: Moving a Data Vault

Bringing peace of mind to growing organizations through simplified and secure data management.



Overview

New York University's data vault was not meeting their performance goals. This was due to a lack of sufficient automation and scalability. The data vault needed a sophisticated solution to provide ease-of-use and agility. Where Scape became the recommended solution provider.



Industry: Education
Location: New York, NY
Size: 500,000 Alumni and 5,000+ Faculty

Company Bio

Since its founding in 1831, NYU has been an innovator in higher education, reaching out to an emerging middle class, embracing an urban identity and professional focus, and promoting a global vision that informs its 19 schools and colleges.

"infoVia's dedication, patience, and willingness to share knowledge really made a difference."

> - Huey Chih Lee NYU Senior Consultant

How infoVia helped NYU in this data project Migrated Data Vault Objects

200+

Added Record Tracking Functionality Architected business vault and associated workflows

Source Systems

5 + 1

Created Consistent
Automation and
Loading Pattern

The Challenge

New York University's data vault was not meeting their performance goals. This was due to a lack of sufficient automation and scalability. The data vault needed a sophisticated solution to provide ease-of-use and agility. Where Scape became the recommended solution provider.

The data vault was substantial and the NYU team had already mapped hundreds of Data Vault objects to their source tables. infoVia's team was left with the challenge of how to move their Data Vault and Data Vault load processes into WhereScape with minimal re-work. A key goal was to maintain the current style of NYU's data vault inside their new environment.

The Approach

Data vault objects are a decomposition of source objects, which include column names and data types. There are many ways a data vault can be created. Everything from the prefixes used to indicate the type of data vault object (e.g. hub), to the columns used to construct the objects themselves are considered in a data vault creation.

To start, the infoVia team used WhereScape 3D to connect to their current data vault and create a warehouse model. They cataloged all the differences between NYU's data vault and the standards used by WhereScape. NYU had followed ensemble modeling tenets and their model was both pattern-based and consistent. This allowed the team to create custom "model conversion rules" in WhereScape 3D which they could rely on to predictably adjust the model. This let them convert the warehouse model of their data vault into a Data Vault Model in 3D.

"NYU's talented data team proved a perfect partner for applying automation techniques to accelerate their development process in the WhereScape environment."

- Christopher S. infoVia Data Architect

The Solution

Now the data vault model, which was adjusted for the WhereScape environment, was ready and it was time to map the objects back to their sources. Our team created the needed connections and then generated WhereScape 3D Source Models for each connection. They used the remap source mappings tool to compare data vault objects with their current source tables. Once the processing was complete the team was able to review and adjust the results. This provided NYU with 95% of the source mapping. The remaining data vault objects had been significantly altered and required discussion with NYU to determine the correct mapping. After our discussion with NYU, the infoVia team completed the data vault source mapping.

Another step was to ensure that all objects had sufficient metadata for WhereScape to complete the automation process. Doing so required significant modification of the relationships between data vault objects as well as managing column attribute types, attribute names, and adjusting the entity naming conventions.

The Results

Complete transition of NYU's data vault into the WhereScape environment. The changes that infoVia implemented were immediate and impactful. NYU data team members were able to concurrently add a new data source which seamlessly integrated with their migrated data vault. Additionally, infoVia provided training for the NYU data team which empowered them to successfully take ownership of the data vault project.