



Cornell University

Cornell University Uses WhereScape® Automation for Data Migration and Data Mart Development

Industry: Higher Education

Location: Ithaca, New York

Employees: More than 2500

Solution: WhereScape RED, on-prem Oracle 11.2 databases, AWS Oracle 12 RDS databases

Highlights:

- Improved speed and performance of nightly data mart refreshes
- Used automation to fast-track migration to Oracle from discontinued platform, and to manage hybrid environment
- Achieved cost efficiencies with WhereScape developer-based pricing

“We have been very pleased with the automated data integration that WhereScape RED provides.”

— Jeff Christen, Data Warehousing Manager, Cornell University



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About Cornell University

Cornell is a privately endowed research university and a partner of the State University of New York. As the federal land-grant institution in New York, Cornell has a responsibility—unique within the Ivy League—to make contributions in all fields of knowledge in a manner that prioritizes public engagement to help improve quality of life within the state, nation and the world. Cornell counts more than 255,000 living alumni, 34 Marshall Scholars, 29 Rhodes Scholars and 46 Nobel Laureates as affiliated with the university. Cornell is made up of 14 colleges and schools with a student body consisting of more than 14,000 undergraduate and 5,000 graduate students from all 50 U.S. states and 122 countries.

WhereScape talked with Data Warehousing Manager Jeff Christen and Data Warehouse Developer Chris Grippin about Cornell’s conversion from IBM Cognos Data Manager to WhereScape® RED. The software is providing Cornell automated data integration for its Oracle data warehouses that manage crucial student, constituent and financial data.

What does your data warehouse environment and staffing look like?

Cornell’s warehouse environment is currently a hybrid of on-premises Oracle 11.2 databases and Amazon Web Services Oracle 12 RDS databases. Our plan is to complete the migration to AWS, and upgrade to Oracle 12, in 2018. The warehouse environment is made up of three major subject areas—the student data mart, which is accessed university-wide by a potential community of 20,000 users and contains 300 presentation tables which are refreshed daily; a constituent database, which drives a lot of the marketing activities as we reach out to donors and other benefactors; and the university’s financial data mart.

We have four data warehouse developers, with individuals responsible for each of the data warehouse subject areas.

What prompted the search for a new enterprise data integration tool?

We previously used IBM Cognos Data Manager to transform and merge data into our Oracle data warehouse, but support for the product was discontinued prompting the search for a new solution.

In doing your due diligence, what did you look for in a new solution?

In order to replace Data Manager, we knew we needed to find a tool to format the data into dimensional models and perform the data transformations. We looked for an open metadata-based solution so in the future we could do data lineage-type extractions for analytics and reporting. Most of the solutions we evaluated had a closed model, and some were too bizarre to navigate.

In addition, many of the tools we evaluated were sold with CPU-based pricing, which was cost prohibitive for us. We were very attracted to developer-based pricing. In addition, we felt a proof of concept with our own data set was crucial to the decision-making process. For our proof of concept, we were able to convert one of the core data model load processes in our financial data mart from Data Manager to WhereScape RED.

After your extensive due diligence, you chose WhereScape RED. Why?

WhereScape was a leader in all areas. The metadata tables that WhereScape RED utilizes are truly open and easily accessible. The software is very intuitive. The developer based licensing is also attractive. The financial data warehouse we converted runs on two 24 core CPU database servers. If we licensed by core, it would have been cost-prohibitive for us. We don't have the 48 CPU cores for ETL performance; it is for query performance downstream, for the users, as well to create a fail-safe environment. Most of the vendors we evaluated tried to license us for 48 cores—and that is just one of our data warehouses. We were able to purchase a four-person WhereScape RED developer license which is proving very cost-effective for us. We are not going to be “nickled and dimed” as our environment configurations change or as our data volumes grow—both of which are inevitable for us.

How do you rate WhereScape's integration and compatibility with your Oracle infrastructure?

We give WhereScape RED high marks. We understand the automated PL/SQL WhereScape RED is generating. We have visibility into generated updates or custom procedures via the metadata layer. WhereScape RED is highly complementary to our Oracle environment.



“WhereScape RED automatically generates all of our documentation for us. It’s incredibly useful to have the insight into the logic behind our data warehouse processing.”



What are your successes with WhereScape to date?

With the successful conversion from Data Manager to WhereScape RED, we've seen improved performance around data mart refreshes. Our evening processing is no longer creeping into business hours. Another notable benefit is the documentation we now have on hand for all of our data warehouse processes. WhereScape RED automatically generates all of our documentation for us. It's incredibly useful to have the insight into the logic behind our data warehouse processing.

Now that we've successfully migrated away from Data Manager and are using WhereScape automation to streamline our data warehouse development, we look forward to providing new content more quickly to our users.

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