WHERESCAPE'S **AUTOMATED DEVELOPMENT** SOLVES **INTEGRATION CHALLENGES** AT VODAFONE NETHERLANDS

Using WhereScape RED to generate Data Vault 2.0 models for their Teradata data warehouse.



"Using WhereScape resulted in a significant saving over our ETL solution."

About Vodafone Netherlands

Vodafone Netherlands is part of the Vodafone Group, one of the largest mobile telecommunications companies in the world with more than 462 million mobile customers and 13.4 million fixed network customers. Vodafone Netherlands has nearly 240 retail outlets, more than five million customers, annual turnover of 1.85 billion and nearly 3,200 employees.

WhereScape talked with Jos Driessen, Manager, BICC Strategy & Architecture and Ronald Seinen, BI Architect, BICC Strategy and Architecture about Vodafone Netherland's successes using WhereScape RED to generate Data Vault 2.0 models for its Teradata data warehouse.

These successes have enabled the telecommunications provider to:

- Start decommissioning its ETL solution in favor of WhereScape RED, with significant savings for Vodafone Netherlands.
- Speed up time to market: initiatives are now completed in a few days versus six months previously
- Process faster: loading data in 10% of the time it previously took

"With WhereScape load times have been reduced by 90 percent."

What were the business issues Vodafone were looking to address with this project?

Vodafone Netherland's ETL development was very complicated and expensive.

For example: We spent a lot of money and 9 months to integrate a core system which resulted in poor data quality and reports deemed unusable. We wanted to deliver new initiatives and changes much faster, improve data quality/freshness, all while reducing operating expenses.



Once you selected WhereScape RED to automate your data integration, what were your next steps?

We started decommissioning our ETL solution and selected WhereScape's automation software as an ELT solution for data integration. WhereScape RED is an integrated, end-to-end data warehouse development environment that, when combined with an agile/scrum development, enables fast time to market and a tuned end result. Our product strategy was as follows:

- *Leverage power of Teradata*. We opted to push all logic into Teradata and use WhereScape's ELT functionality for data integration.
- *Leverage power of Data Vault 2.0*. We use WhereScape RED to integrate Data Vault with our Teradata data warehouse.
- *Leverage power of WhereScape RED*. We worked with WhereScape to deliver templates that will be used in an upcoming WhereScape RED release. WhereScape RED will fully support Data Vault 2.0 generation.
- Use Agile / Fail fast delivery. First expose new sources in a Data Mart to Business users and then revert back to build / generate the best possible Data Vault to support this Data Mart.

How crucial is WhereScape RED's integration with Data Vault 2.0?

Many of the savings we incur are based on the fact that WhereScape RED automatically generates Data Vault 2.0 code. Data Warehouse Automation and Data Vault are two of the 5 concepts you need to make a project like this successful. You also need an agile / fail fast process in place to facilitate an iterative development process and the ability to push down all code into Teradata and use ELT.

"The results Vodafone Netherlands has achieved using WhereScape RED has brought our BICC to the next level."

What direct impact has WhereScape RED had on your development projects?

We no longer call them projects; we refer to them as initiatives. We have already completed five initiatives with WhereScape RED that can be summarized as follows:

1. Start decommissioning ETL

We spent a lot of money and nine months on a project to integrate a new core system.

The data quality was very poor, we did a lot of bug fixing, and the business users still couldn't use the reports. We have started decommissioning this ETL product and started all over again using WhereScape RED.

2. Gathering process information.

Our core systems have changed and we don't have a centralized business process engine. As a result we don't have process information. We use WhereScape RED to gather process information and can signal process problems on an individual level. Example: When an order gets stuck.

3. Detecting data quality issues.

Our current ETL is very complicated. We've built an 'alternative' route from our core system to our data warehouse with WhereScape RED using ELT to detect data quality issues in our Data warehouse. We've ordered our vendor to fix data quality issues in ETL; in the mean time we have to support our business and have implemented eight alternative feeds using WhereScape RED. We decided to use this alternative data in our reports until the data quality in the ETL is fixed. But why would we invest more in a complicated ETL solution when we already have the data in place? We are decommissioning parts of our complicated ETL and use WhereScape ELT in its place.

4. Picking up speed.

We're able to combine our Data Vault with our current LDM. In the past we used ETL—all transformations were performed on Unix and a local SAN. We decommissioned parts of the LDM and changed to Data Vault to enable parallel loading. Our Data Vault is loaded using WhereScape ELT. Processing of our day run was 14-16 hours—we now process a day run in 10% of that time.

5. Faster time to market.

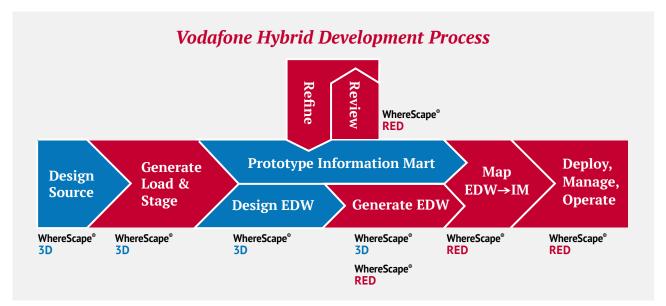
In the past a project would take at least six months. We now use Agile / Fail fast and present new sources to business users in a few days. Then we revert back to the Data vault and built / generate. Result: We can now deliver an initiative in a few days.



What are your future plans?

We want to leverage the power of Hadoop and use WhereScape RED to generate code to push into Hadoop. This guarantees us data lineage during the whole process and opens up new opportunities for big data integration with our Teradata data warehouse in Teradata.

"Using WhereScape RED and an agile / fail fast approach, our business participates in 'initiatives' to calibrate our end results. We can deliver first results in just a few days."



What specific results and benefits have you achieved with WhereScape RED?

- Cost savings: Using WhereScape resulted in a significant saving over our ETL solution.
- Faster time to market: Initiatives are now completed in a few days versus six months previously.
- Faster processing: Load times have been reduced by 90 percent.
- Products: Time to market for new initiatives is now a few days versus six months previously
- Process: Agile/fail fast means calibrated end results.
- Organization: No offshore development: WhereScape automated our outsourcing
- Vodafone BICC contributed greatly to the company's bottom line and helped greatly improve operating efficiencies.

Any final thoughts?

The results Vodafone Netherlands has achieved using WhereScape RED has brought our BICC to the next level. Vodafone leveraged the power of Teradata, ELT, Data Vault 2.0, WhereScape's data warehouse automation software, and an agile/fail fast development methodology. Combining these concepts has produced significant cost savings and very favorable results.