

WhereScape®

UNION BANK

Union Bank uses agility and automation to rapidly deliver business-critical data marts



“WhereScape RED is providing Union Bank a very powerful, repeatable, low-cost way to develop in parallel and with agility.”

About MUFG Union Bank

MUFG Union Bank, N.A., with assets of \$113.5 billion as of June 30, 2015, is a full-service bank with offices across the United States, providing a wide spectrum of corporate, commercial, retail banking, and wealth management solutions to meet the needs of customers. The bank also offers an extensive portfolio of value-added solutions for customers, including investment banking, personal and corporate trust, capital markets, global custody, transaction banking, and other services.

WhereScape talked with Ryan Fenner, Union Bank’s VP, Data Solutions Architect, about the bank’s strategic and cultural shift towards viewing data as a corporate asset and how WhereScape RED has enabled automated and agile Microsoft SQL Server development, the results being fast development—in weeks not months—of business-critical data marts.

Q: What events led Union Bank to focus on data as a strategic asset?

Thanks to a host of factors – including technological change, merger and acquisition activity, and changing business requirements – the bank previously depended on a patchwork of point solutions to support its reporting and analytic needs. The traditional thinking was the bank would get the data in and out and figure out the reporting and analytics later. That changed when new leadership prompted Union Bank to conduct an extensive review of its decision support and data management systems. This culminated in a decision to fund a data warehouse project based on the Greenplum massively parallel processing (MPP) database.

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Key Benefits:

- Automated, agile and integrated SQL Server and Greenplum development
- Dramatically reduce development time from months to weeks
- Metadata management and data lineage support compliance efforts
- Automatic creation and management of documentation
- Encourages IT/business collaboration

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Q: What were your goals in developing an enterprise data warehouse?

Union Bank wanted its data warehouse system to function as a single, consistent source for reporting and analytics, which would greatly enhance the bank’s regulatory and government-mandated reporting requirements and boost its overall compliance efforts. With a centrally managed data warehouse, there would be no question of inconsistent numbers, incomplete data, contradictory findings, or other anomalies. The bank needed that level of trust and data certification delivered by a data warehouse to support this need. Just as important, the new data warehouse would also help Union Bank fill a huge need in reporting, analytics, and BI.

Q: What were your concerns in embarking on your Greenplum development?

Union Bank recognized traditional data warehouse development takes a long time, costs plenty of money, and – in too many cases – produces warehouse systems that are brittle– proving hard to change and difficult to manage. Union Bank wanted a more flexible and resilient approach to warehouse design, development, and management.

Union Bank also understood that reliability and availability – to say nothing of consistency and trust – are just part of the equation. Business requirements and conditions must and will change, such that the performance, consistency, and availability of even the fastest data warehouse system tends to degrade over time. In other words, the bank needed a more flexible approach to data warehouse development. On top of this, it needed quick time-to-value. The challenge with any data warehouse implementation where you are trying to do everything in a single environment is time. The bank needed a way to get there faster to help accelerate the development process.

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Q: Will you further describe your development efforts?

Union Bank opted to split its development efforts into parallel tracks. The first track consisted of the primary Greenplum implementation effort. The second track – designed to address an immediate business requirement – focused on developing a business-facing consumer-lending data mart based on Microsoft SQL Server. The bank's dilemma was how to deliver a quality, low-cost product to its business units that would enable them to derive business value from their data much faster. The bank viewed this departmental reporting solution as an interim approach that fit in well with its strategic direction.

Q: How does WhereScape play into those development efforts?

To accelerate the development and delivery of the business-facing data mart project, Union Bank decided to use WhereScape RED, an automated data warehouse development environment. The bank's logic was simple – SQL Server is a much cheaper platform than is Greenplum's MPP database. For this reason, a departmental reporting solution could function as a serviceable and cost-justifiable interim solution while the IT team worked to build out Union Bank's primary Greenplum data warehouse.

Q: What was your first WhereScape use case?

The business-critical data mart project for the consumer lending group was the bank's first use case. Union Bank's use of RED proved so successful that Union Bank decided to use it in their larger and more ambitious Greenplum development project. By following a consistent and repeatable process with each business unit, the goal is to use WhereScape to compress the time down even further as processes are fine-tuned.

Q: What specific results have you achieved with WhereScape RED?

Union Bank used WhereScape RED to rapidly scope, prototype, and build out its business facing data mart from source systems in less than eight weeks. Using conventional development methods would have required six-to eight months. This was in spite of the fact that the proposed consumer-lending data mart was highly complex, consisting of two major areas of consumer lending data consisting of servicing and originations that needed to be integrated. It wasn't the amount of data that was moved that was the issue, it was the sheer variety of elements and attributes contained in the data set that the bank was most concerned about. WhereScape RED automated almost everything, beginning with the initial loading or population of the data mart itself. From there, RED automatically derived new data, built dimensions, generated aggregates, and created a semantic layer. WhereScape RED also automated the creation and management of the data mart's documentation. WhereScape RED generated SQL code optimized for both SQL Server and Greenplum.

Q: How will you move the data from SQL Server to Greenplum?

Union Bank will use WhereScape RED to migrate – to essentially forklift, but with platform-specific optimizations – its consumer lending data mart from SQL Server to Greenplum. The data mart becomes a point of abstraction for consumers of information right now, but using WhereScape we will be able to move this mart into the enterprise data warehouse when it is stood up. Using WhereScape RED, the bank will simply reprovision the mart – the mart doesn't change – and reprovisioning can be done with minimal additional effort using WhereScape RED.

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Q: Any key features of WhereScape RED that benefit Union Bank?

One area in which WhereScape RED really shines is in its ability to accommodate proprietary data sources. Like most organizations, Union Bank had its own share of “spreadmarts” – where individual analysts maintain their own copies of spreadsheets, or almost as common, custom database tables. Using WhereScape RED, the bank was able to bring in these valuable, yet isolated data sets into the data mart for all to benefit from.

In addition, WhereScape boasts a best-in-class metadata management feature set– RED automatically generates metadata when it builds and populates a data warehouse. Being in financial services, metadata management and data lineage are crucial to our compliance efforts and WhereScape helps us tremendously with that effort. We have to have documented data. WhereScape provides us intrinsic value with that feature in and of itself.

Q: How has the business responded to your successes?

In traditional warehouse development, the scope of a project – e.g., its requirements, its timetable, and its deliverables – is negotiated upfront. Business conditions and requirements inevitably change, however – as do expectations and priorities. Using WhereScape RED’s collaborative development model, the business stakeholders in Union Bank’s consumer lending group were able to work closely with data warehouse architects throughout the design process.

The hallmark of a successful project isn’t only quick delivery, but customer satisfaction. Union Bank’s new consumer-lending data mart has been nothing less than a business smash. It created a huge buzz internally that has resulted in other business units requesting similar assistance. Candidates include the marketing group, the global capital markets group, the credit risk management group, or the call center. WhereScape enables this unique approach where the subject matter experts and the analysts – the folks who really know the data – can sit down with the data warehouse group and collaborate as a team. It is a very powerful development model. WhereScape RED is providing Union Bank a very powerful, repeatable, low-cost way to develop in parallel and with agility.



About WhereScape

The pioneer in data warehouse automation software, WhereScape empowers organizations constrained by time, money or lack of resources, to deliver business value from their decision support infrastructure – including enterprise data warehouses, business facing data marts, and big data solutions. WhereScape has global operations in the USA, UK, Singapore, and New Zealand. www.wherescape.com