WhereScape automates Data Vault 2.0 data warehouses with Data Vault Express

MATT ASLETT

15 MAY 2017

Data Vault Express includes versions of WhereScape's 3D and RED data-warehouse automation products designed specifically to support the generation of data warehouses supporting data vault models.

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Building on a 2016 strategic partnership with Dan Linstedt, a creator of data vault models, WhereScape has announced the launch of WhereScape Data Vault Express, which includes versions of its 3D and RED data-warehouse automation products designed specifically to support the generation of data warehouses based on Data Vault 2.0 models. Compared with traditional data-warehouse modeling approaches developed by Bill Inmon and Ralph Kimball, the data vault approach is designed to be more flexible to business and technology change.

THE 451 TAKE

Adoption of Data Vault 2.0 as an approach to data-warehouse modeling is still in early stages, as evidenced by the low number of existing WhereScape customers using it. However, the lack of automation software could be argued to be one of the reasons for that low level of adoption, and the availability of WhereScape Data Vault Express should reduce the reliance on hand coding to create data vault models. We anticipate growing interest, given the flexibility advantages of data vaults compared with more traditional data modeling approaches, and WhereScape is well-positioned to take advantage of that with its data-warehouse automation expertise in general, and its strategic partnership with Linstedt in particular.

CONTEXT

Data-warehouse automation (DWA) specialist WhereScape has introduced a new product called WhereScape Data Vault Express to address growing interest in the data vault approach to data-warehouse modeling. Created by data-warehousing consultant Linstedt in 1990 and made available as public domain in 2000, data vault is an alternative to traditional approaches to data-warehousing models created by Inmon and Kimball.

Rather than attempting to define a single version of the truth and force all data to adhere to a predefined schema, the data vault approach has been said to deliver a 'single version of the facts' by creating a long-term store of all historical data to which schema can be applied as and when it is required for a specific use case. The result is a data warehouse that is adaptable to change and supports traceability of data lineage for governance and auditing purposes.

The latest version of the specification, Data Vault 2.0, was published in 2013 as an open standard. It outlines the model, the methodology and the associated systems architecture, with version 2.0 having added support for big data and NoSQL data sources.

In July 2016, WhereScape announced a strategic partnership with Linstedt and promised to deliver Data Vault 2.0 development products. WhereScape Data Vault Express fulfills that promise. It is designed to reduce the manual effort required to create a data warehouse based on the data vault model, and consists of data-vault-enabled versions of the company's existing data-warehouse automation products: 3D and RED.

WhereScape 3D is the company's data-warehouse design and test tool, and will specifically enable users to design and test projects based on the Data Vault 2.0 standard. WhereScape RED is the company's flagship offering for developing, deploying and managing data-warehouse environments, including those based on Data Vault 2.0.

WhereScape notes that data vault models are already in use by 10-12 of its paying customers. The company has more than 700 paying customers in total, indicating the early stage of adoption for data vault, but it is a growth area, and one that the company is keen to be closely associated with.

The inherent flexibility of the data vault approach ties in with WhereScape's evolving strategy to address emerging data platforms, such as Hadoop and NoSQL databases, in addition to traditional relational analytics databases. Furthermore, the ability to audit all data in the data warehouse and trace data values back to the source is highly relevant to regulatory compliance requirements.

In addition to introducing Data Vault Express, WhereScape has been through a number of executive changes since our last update. Cofounder Michael Whitehead stepped down from the role of CEO in December, with Mark Budzinski, formerly president of WhereScape USA and global head of sales, stepping up to the chief executive role. Whitehead remains with the company as president.

More recently, WhereScape appointed Neil Barton to the role of chief technology officer. Barton previously served as WhereScape's senior architect focused on big data, and will now lead the company's technological approach to address emerging data platforms. The company has 65 employees in total. We were previously told that number was closer to 150, but now understand that figure included independent contractors and affiliated entities, not least the NOW Consulting division, based in New Zealand, which is transitioning to become a global entity and is not included in the current headcount.

COMPETITION

The primary competition for WhereScape comes from other vendors with specialist DWA products, including Attunity with Compose (based on the BIReady DWA assets that it acquired in late 2014 combined with the data-loading and change-data-capture capabilities of its existing Replicate offering), Magnitude with Kalido Information Engine and TimeXtender. The latter has recently reworked and repositioned its software as a Discovery Hub supporting self-service analytics, but data-warehouse automation remains at its heart.

None of the company's competitors has been particularly vocal regarding data vault modeling (although Attunity Compose does support it), which is reflective of the early stage of adoption. There is also the point that DWA has always been something of a niche market, compared with the wider practice of using more traditional ETL tools from data-integration providers such as Informatica, IBM and Talend, as well as data-warehouse consultancies using manpower (and racking up billable hours). The vendors are often more focused on evangelizing DWA versus traditional approaches, rather than the benefits of particular models.

SWOT ANALYSIS

STRENGTHS
WhereScape has clear expertise when it comes to data warehousing – specifically data-warehouse automation – and is a well-established player that can boast strong partnerships with the major analytic database providers.

WEAKNESSES
To date, data-warehouse automation has been something of a niche market, meaning that the company has to evangelize its approach with potential new customers.

OPPORTUNITIES
Adoption of the data vault approach is still in its early stages, but the partnership with Linstedt could help the company gain ground as interest grows in more flexible approaches to data modeling.

THREATS
As perhaps the best known of the DWA vendors, WhereScape is a prime competitive target, and like its direct rivals, must compete with a reliance on more traditional ETL tools, as well as established processes.