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# WhereScape

## Product Profile and Evaluation

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## About the Authors

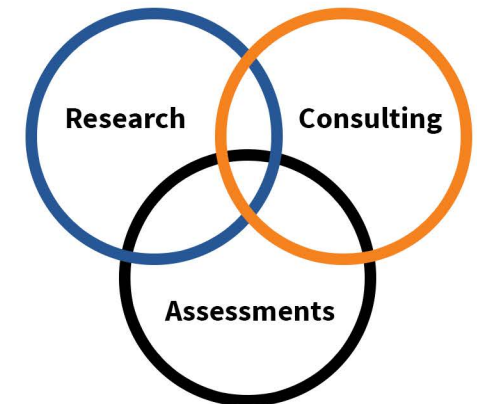


**Wayne Eckerson** has been a thought leader in the business intelligence and analytics field since the early 1990s. He is a sought-after consultant, noted speaker and expert educator who thinks critically, writes clearly and presents persuasively about complex topics. Eckerson has conducted many groundbreaking research studies, chaired numerous conferences, and written two widely read books on performance dashboards and analytics.

Eckerson is founder and principal consultant of Eckerson Group, a research and consulting firm that helps business and analytics leaders use data and technology to drive better insights and actions. His firm helps companies develop strategies and roadmaps that maximize their investment in data and analytics.

## About Eckerson Group

Eckerson Group is a research and consulting firm that helps business and analytics leaders use data and technology to drive better insights and actions. The firm helps companies develop strategies and roadmaps that maximize their investment in data and analytics. Its consultants and researchers each have more than 20 years of experience in the field and are uniquely qualified to help business and technical leaders succeed with business intelligence and analytics, big data management, data governance, performance management, and the internet of things.



## About This Research

This product profile is part of a larger research study on data warehouse automation tools. The base report titled, “**Data Warehouse Automation Landscape: Product Categories and Positioning**” outlines the value of using data warehouse automation tools, classifies the products in an evaluation framework and matches product categories to business requirements. The report also provides criteria for evaluating data warehouse automation products along with key questions to ask vendors. Vendors profiled in this series are WhereScape, Magnitude Kalido, TimeXtender, and Attunity Compose.

## Product in Brief

*New Zealand-based WhereScape offers data warehouse automation tools that use a data-driven approach to designing and managing data warehouses and data marts. By designing models based on actual data rather than conceptual or logical constructs, WhereScape enables users to iterate quickly through realistic designs.*

*WhereScape's data-driven approach is ideal for creating subject-specific data marts using relatively clean data from existing data warehouses. In 2011, WhereScape introduced a data profiling and model testing tool called WhereScape 3D that enables developers to inspect data prior to importing it into its flagship automation product, WhereScape RED. This makes WhereScape more suitable to supporting more complex data environments.*

*WhereScape can generate any data model, including data vaults. It runs on a variety of database platforms and generates native SQL and stored procedures, which it stores in a metadata repository in the data warehouse. Because of its open architecture, customers can use WhereScape to create new data warehouses and data marts or renovate existing ones.*

## Company Profile

**Founding.** WhereScape was founded in 2001 by two consultants who built a precursor of WhereScape RED as a consulting tool.

Although the company is headquartered in New Zealand, WhereScape realized it needed to gain a presence in North America to succeed. The company created a North American subsidiary called WhereScape USA based in Portland, Oregon. Today, more than half of WhereScape's revenues come from the United States.

Company Name	<b>WhereScape®</b>
Founded	2001
Focus	Data warehouse automation
Employees	100+
Revenues	~\$50 million
Direct/Indirect Revenue	90/10
License/Service Revenue	70/30
Headquarters	Auckland, New Zealand
Ownership	Private (Pioneer Ventures owns 43%)

WhereScape has a 70/30 ratio of license to service revenue. Most customers purchase consulting services to get their first project off the ground. “Customers who purchase data warehouse automation software do so to reduce costs, so we bundle services to make sure the first project is done right,” says Mark Budzinski, president WhereScape USA.

## Customer Profile

WhereScape has 700 customers spanning nearly every industry and geography, although a majority reside in the United States. WhereScape generally sells to information technology (IT) departments, many of which are renegade or shadow IT groups inside a business unit or department.

Historically, WhereScape has been used to generate subject-specific data marts for business unit of

functional groups. However, its 2013 reseller agreement with Teradata is generating larger, brand name customers and much bigger deal sizes.

Number of Customers	700 customers (unique logos)
Key Markets	All verticals; majority of customers in U.S. Many data mart deployments
Key Buyers	IT department; Business managers with shadow IT
Pricing Model	Perpetual license by named user starting at \$50,000
Initial Deployment	One to four users

**Use Cases.** WhereScape cites six primary use cases among its customer base.

- 1.Create subject-area data marts (~50%)
- 2.Create new data warehouses (~25%)
- 3.Build data mart prototypes (~7.5%)
- 4.Support data migration (~7.5%)
- 5.Replace hand-coded ETL (~5%)
- 6.Populate with Hadoop data (~5%)

**Pricing Model.** WhereScape charges a perpetual license starting at \$50,000 per named user depending on the target database with a 20% annual maintenance. There is no charge for additional data sources or application servers. Customers can deploy as many data marts or data warehouses as they wish on the target database without incurring additional fees.

## Customer quotes

*We estimate the development lifecycle is 20-25% of what it was previously when we were hand coding.*

**- Dan Mosher, Director of Enterprise Data Warehousing, United Rentals**



*Going from waterfall to agile is one thing, but using WhereScape's rapid, iterative prototyping capabilities with agile is really a quantum leap forward.*

**- Alain Bond, Business Intelligence Manager, Canadian National Railway Company**

*WhereScape enabled us to design, develop, document and deploy a production-ready solution in eight weeks. Using traditional data warehouse development methods would have taken us six to eight months.*

**- Ryan Fenner, VP, Data Solutions Architect, Union Bank**

## Product Profile

Product Name	 
Initial Launch	2003 and 2011, respectively
Current Release and Date	WhereScape RED v6.8.4.0 - July 2015; WhereScape 3D v 2.3.2.0 - February 2015
Key New Features	RED: Native HDFS connector; improved integration with 3D 3D: Improved ease of use and lineage tracking
Next Release and Date	RED: v7 ships end of 2015 3D: v2.5 ships in September, 2015
Key New Features	RED: Better support for cloud databases; Use Hive for ELT 3D: Improved GUI and wizards
Competitors	Magnitude Kalido, TimeXtender, and Attunity Compose



WhereScape offers two products. The flagship product is WhereScape RED which is a development environment for building, deploying, and managing data warehouses and data marts. In 2011, WhereScape shipped WhereScape 3D, in response to customer demand, which enables customers to profile source data and test target schema with actual data.

**Data-driven.** Unlike other data warehouse automation tools, WhereScape is a data-driven development environment. WhereScape doesn't contain a separate modeling tool to create conceptual or logical models. Rather, WhereScape developers start the design process by first importing external data and then modeling the data from there.

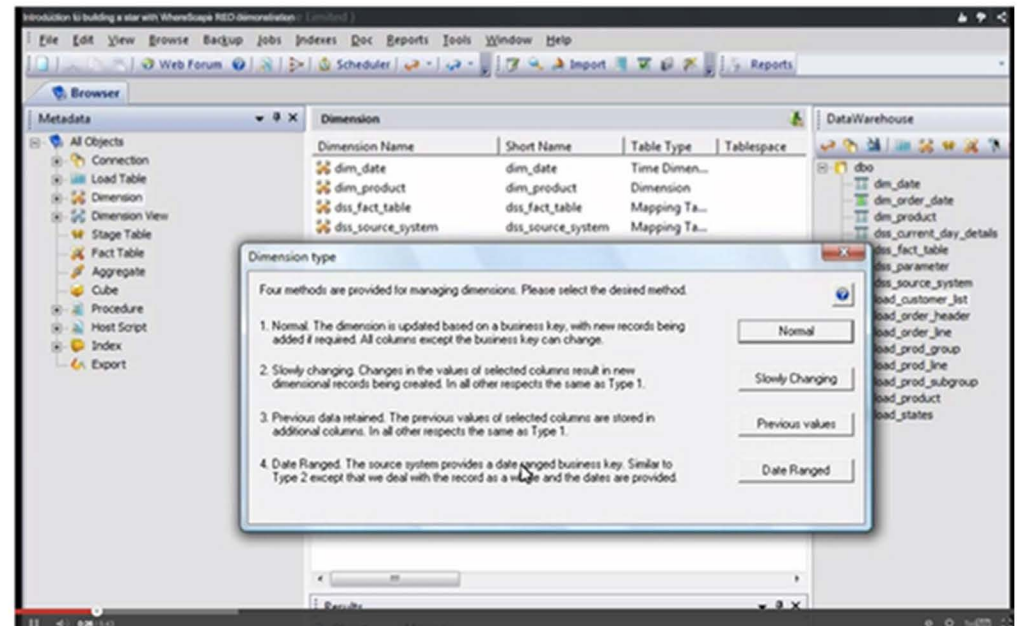
"We go right from source data to physical model, and we work with customers and iterate until we get it right," says WhereScape's Budzinski.

WhereScape can build a variety of data warehouse models, including third normal form, snowflake, star, and data vaults, and it can import Erwin models. And it can use WhereScape 3D to test the validity of any data model, whether an external or WhereScape model

WhereScape automates the creation of data warehouse structures - dimensions, facts, indexes, transformations, etc. - using native SQL and stored procedures of the underlying data warehouse database. This extract, load, and transform (ELT) approach obviates the need for an ETL tool, saving customers money and development time. WhereScape stores the transformation code and metadata in the target data warehouse, where developers can inspect and alter the code as needed.

**Operations.** WhereScape offers an integrated scheduler to coordinate the execution of load, transformation and publishing jobs. Administrators can monitor processes to ensure proper execution and investigate logs to troubleshoot errors. WhereScape maintains strong version control, so administrators can roll back builds to a previous state. It also produces business and technical documentation in easy to read HTML pages.

### WhereScape Creates Dimensional Model from Source Data



## Architecture

WhereScape runs on Windows desktops and uses the target data warehouse database as the server to store metadata created in the development tool, run jobs, and execute code.

WhereScape is an open data warehouse automation product. It supports a variety of target databases, including Microsoft SQL Server and the Analytics Platform Server. It also supports Teradata, Oracle, IBM DB2, Greenplum, Netezza, and Exadata. It is currently beta testing Amazon Redshift and Microsoft's Azure databases. WhereScape can

generate OLAP cubes, specifically Microsoft SQL Server Analysis Services. Otherwise, it doesn't generate semantic layers for reporting and analysis tools.

WhereScape relies on the underlying data warehouse database to do the heavy lifting. It uses ODBC to access source metadata, although it has custom connector to Salesforce and HDFS, and it is working to improve access to cloud data sources. It uses native load utilities to ingest data and native SQL and stored procedures to execute transformations, build indexes, and publish data.

Client	Windows 2000+
Server	None
Data Access	ODBC and DW Database access methods
DW Databases	MS SQL Server, MS Analytics Platform Server (APS), IBM DB2, Teradata, Oracle, Greenplum, Netezza, Oracle and Exadata, (In beta: Amazon Redshift and Microsoft Azure SQL Server..
Loading	DW database load utilities
Transformations	SQL and stored procedures of DW database
BI Tools	Tool agnostic

## Differentiators

WhereScape offers numerous capabilities that set it apart from its competitors.

- 1 **Data-driven approach.** Rather than dream up models that can't be implemented because data doesn't exist to support them, WhereScape starts with the data and builds models from there.
- 2 **Import any model.** With WhereScape, you can import any model and populate it with data, which means you can use WhereScape to build new data warehouses or renovate existing ones.
- 3 **Data profiling and model testing.** WhereScape 3D augments the data-driven approach by enabling developers to profile data sources so they know exactly what data they have to work with before using new, existing or packaged models.
- 4 **Support for data vault.** Because WhereScape works at the data level, it is one of the few data warehouse automation vendors that generates data vault models.
- 5 **Broad platform support.** WhereScape supports the largest number of target databases of any data warehousing vendor, including Teradata, Oracle, SQL Server, Microsoft Analytics Platform System, DB2, Greenplum and Netezza, as well as some cloud databases.
- 6 **No ETL tools required.** WhereScape uses an ELT approach that relies on the underlying data warehouse database to execute instructions required to load, build and maintain the environment.
- 7 **No proprietary code.** Since WhereScape leverages the underlying database to generate and execute code, it is an open environment that developers can alter and run without WhereScape.
- 8 **Consistent development.** WhereScape imposes a consistent development framework and code templates to ensure developers follow a similar path and style of development.
- 9 **Generate HTML documentation.** WhereScape produces business and technical documentation that enables users to explore data warehouse designs, dictionaries, process dependencies and end-user objects.
- 10 **Integrated scheduler.** WhereScape has its own scheduling tool that creates jobs and monitors execution. It runs on a Windows or Unix server.



## Should You Buy WhereScape?

### Yes, Buy if:

- 1 **Want a data-driven approach** that designs data warehouse schema based on actual data, not conceptual or logical designs.
- 2 **Want to generate subject-specific data marts.** WhereScape is ideal for automating the creation and management of data marts for an existing data warehouse.
- 3 **Need to support various models.** WhereScape can generate any type of schema, including star, snowflake, 3NF, and data vault.
- 4 **Don't have or want an ETL tool.** WhereScape uses an ELT model in which the data warehouse database to generate and execute data warehouse automation code.
- 5 **Want to renovate or migrate an existing data warehouse.** Since WhereScape uses native database code to load, create, and manage the data warehouse, it can be used on both new and existing data warehousing environments.
- 6 **Need to support multiple data warehouse databases.** WhereScape supports a broad set of databases as data warehouse targets.
- 7 **Want usable documentation.** WhereScape generates HTML based documentation tailored to users and developers.

### No, Don't Buy if:

- 1 **Want a model-driven approach** that uses actual business requirements, not data, to design data warehouse schema and artifacts.
- 2 **Want a conceptual modeling tool geared to data warehousing.** WhereScape's design tool generates physical schema, not conceptual or logical models.
- 3 **Have invested in an ETL tool.** If your company has an ETL tool that it must use, then you won't get the full value from WhereScape unless you can convince your ETL developers to use WhereScape.
- 4 **Want semantic integration with BI tools.** WhereScape doesn't generate semantic models for BI tools.



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