

# WhereScape® Data Vault Express™

## Automate the Data Vault Life Cycle to Deliver Analytics Solutions Faster

With digital transformation and its fuel—data and data analytics—impacting nearly every business, there's an unprecedented urgency for IT to deliver a constant stream of new analytics solutions to the business. In response, IT teams are turning to a new way of thinking about enterprise data warehouses: the Data Vault 2.0 methodology.

Designed to be resilient to business and technology changes, the Data Vault 2.0 approach simplifies data ingestion from multiple sources, makes it easy to add new data sources without disruption, and increases scalability and consistency.

While completed data vaults deliver many benefits, designing and developing them by hand require significant time, effort, and money. Automation can provide IT teams with the help needed to deliver new solutions as rapidly as the business needs them. WhereScape® Data Vault Express™ automates the entire data vault life cycle, enabling your organization to deliver analytics solutions to the business far more quickly, at a much lower cost, and with better success than do-it-yourself approaches.

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*“WhereScape Data Vault Express can reduce the complexity and costs associated with building and updating data vaults, as well as the learning curve for teams new to the data vault methodology.”*

— Daniel Linstedt, Creator of the Data Vault

## Cut time to production by two-thirds

WhereScape Data Vault Express dramatically cuts your time to production for data vault-based analysis solutions. In fact, WhereScape customers average two-thirds faster design and development compared to manual efforts using disparate tools.

Helping your team iterate faster on model design, WhereScape Data Vault Express automatically generates:

- Hubs, satellites, and links
- Hash keys and change keys
- Metadata attributes, including load date and record source
- Native code to instantiate and populate the data vault

## Shorten the learning curve

Is this your team's first time creating a Data Vault 2.0 architecture? If so, it likely faces a steep learning curve compared to more traditional data warehouse approaches.

WhereScape Data Vault Express dramatically shortens the learning curve for teams new to the data vault methodology by:

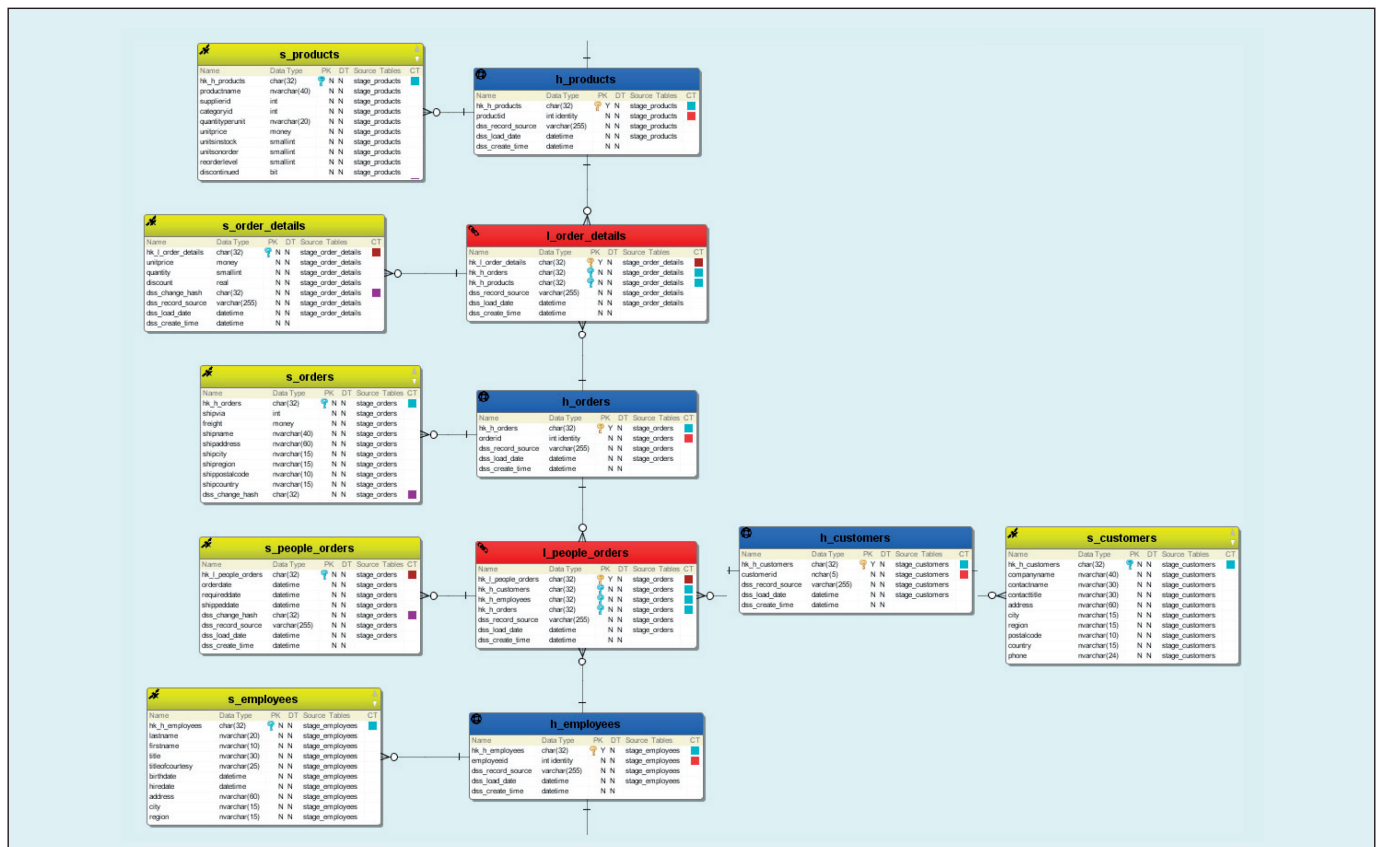
- Reducing the complexity of building and updating data vaults compliant with the standard
- Providing built-in Data Vault 2.0 patterns and best practices
- Simplifying and accelerating development with built-in wizards and templates

## Reduce project risk

WhereScape dramatically lowers your risk of failure by getting you to production faster, with higher quality. You get the consistency, agility, and performance you need to deliver successful analytics solutions to the business.

WhereScape Data Vault Express:

- Automates the design, creation, and operation of enterprise data vaults
- Enables your organization to deliver analytics solutions far more quickly, at a much lower cost, and with lower risk than do-it-yourself approaches
- Generates uniform and optimized native code to significantly reduce the risk inherent in learning a new target platform



### Data Vault diagram in WhereScape 3D for Data Vault 2.0

## WhereScape® automation for Data Vault 2.0

WhereScape Data Vault Express is specifically engineered and integrated for Data Vault 2.0 and includes:

- WhereScape® 3D for Data Vault 2.0, a design tool customized for quickly designing and reality testing your data vault and analytics projects.
- WhereScape® RED for Data Vault 2.0, an integrated and customized development environment for rapidly developing, deploying and operating your data vault.
- Optional Streaming capabilities to automatically populate your data vault with real-time data, begin processing on arrival, enrich with existing data or simply persist data for future use.

Data Vault Express Features	Benefits
Automated creation of all hubs, satellites, and links from metadata models	<ul style="list-style-type: none"> <li>• Significantly reduces development time</li> <li>• Accelerates iteration on model design</li> <li>• Follows established Data Vault 2.0 patterns and best practices</li> <li>• Enables complete lineage from source-to-target, as well as impact analysis and full documentation</li> <li>• Streamlines knowledge transfer and improves maintainability</li> </ul>
Automatic generation of hash keys and change keys	<ul style="list-style-type: none"> <li>• Significantly accelerates the development of hash and change keys</li> <li>• Improves the robustness of the code</li> <li>• Ensures that hash and change keys are consistent across entities to reduce the risk of discrepancies and potential data consistency issues downstream</li> </ul>
Automatic management of all metadata attributes including: load date and record source	<ul style="list-style-type: none"> <li>• Reduces risk and streamlines ongoing maintenance</li> </ul>
Automatic generation of all code required to instantiate and populate the data vault	<ul style="list-style-type: none"> <li>• Reduces the time and effort it takes to deliver new analytics solutions</li> <li>• Delivers consistent, robust, and stable code to reduce project risk</li> <li>• Maximizes the performance of the underlying technology thanks to native, optimized code</li> <li>• Supports quick iterative cycles, while still maintaining control and governance.</li> </ul>

Data Vault Express Features	Benefits
Optional Streaming capabilities mask real-time data ingestion complexity, conduct data vault-specific processing in-flight and create new analytics opportunity	<ul style="list-style-type: none"> <li>• Metadata-driven approach automatically provides the documentation and lineage needed to understand and leverage streaming data flows</li> <li>• Real-time ingestion ensures analytics consumers can access the data as soon as it arrives</li> <li>• Streaming data can be blended with batch-based data for data enrichment and/or interwoven in traditional data vault processing</li> </ul>

**Maintain Hash Key Columns**

Hub Hash Keys  
Link Hash Keys  
Change Hash Key

Please select columns to use in the hash by moving columns from the Available list to the Selected list. Enter a name for the Hash then use the Add button to add the Hash to the list of Hub Hash keys below.

Available Columns:

- order\_id
- customer\_id
- employee\_id
- order\_date
- required\_date
- shipped\_date
- ship\_via
- freight

Selected Columns:

Hash Key Name:

Hash Key Column	Source Columns
hk_h_order_id	order_id
hk_h_customer_id	customer_id
hk_h_employee_id	employee_id

#### Hash Key Wizard in WhereScape RED for Data Vault 2.0

#### 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](http://www.wherescape.com)

<https://www.wherescape.com/request-a-demo/>

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