



### How to Work With Your

# Snowflake Data Cloud Data Model



Hands-On Lab with Dan Galavan

# Webinar Q&A

- Will we be getting access to the recording of this session?
  A copy of this recording can be found here, or on our Blog.
- Will the deck be shared?
  A copy of the slide deck used in the webinar can be found here.
- 3. Where can I find the Snowflake SQL Scripts used in the Webinar? Please click here.
- 4. What kind of data modeling framework do you recommend for EDW Layer in Snowflake? 3rd Normal form (or) Star schema?

This really depends on your needs, as SqIDBM does not differentiate and supports both for designing and SQL generating.

### 5. Can we have oracle tables as a source for snowpipe?

SqIDBM allows importing Oracle DDL and then converting into a Snowflake project with a few clicks. Please check out our conversion feature. (Please note: A step would be required to extract data from Oracle. An example would be using Fivetran. If streaming is the requirement, Kafka would be an example. The outputs from here can be used as an input into Snowpipe.

6. What are the data model options to consider when migrating to Snowflake from other technologies? Is it a good idea to start from scratch and remodel or Lift-and-Shift?

We do have a DB conversion feature that allows our customers to convert their legacy DBs (DDL only) into Snowflake with a few clicks. For example, you can convert

Oracle/Redshift/SQL Server into Snowflake. In many instances, our customers choose a hybrid approach, where they convert their existing legacy systems and build other parts of their Snowflake project from scratch.

# 7. What other methodologies exist for data consumption other than Kimball? Are you aware of any alternative to Kimball?

Our customers use both Inmon and Kimball approaches.

# 8. What kind of data type do you recommend for keys? Integer (surrogate keys) or Natural keys?

In relation to Snowflake and data warehousing, we would recommend natural keys as an input to primary key definition in your warehouse. This means you can configure primary keys in a deterministic manner. Likewise, it is a basis for avoiding lookups during the ELT process. Also useful in the context of loading data in parallel.

9. On SqIDBM, if you have a "Snowflake specific" property (like cluster keys) how easy is it to move the model to another database? Will these properties carry over, or be lost and then retained if I switch back to Snowflake?

We do have a DB conversion feature that allows our customers to convert their legacy DBs (DDL only) into Snowflake with a few clicks. For example, you can convert Oracle/Redshift/SQL Server into Snowflake. In many instances, our customers choose a hybrid approach, where they convert their existing legacy systems and build other parts of their Snowflake project from scratch. All this to say, we are more concentrated on converting other DBs to Snowflake – rather than the other way around. To answer your question: if you convert your Snowflake project to something else, then Snowflake specific objects will not be retained.

# **10.** How does SqIDBM manage drift/model versioning when it reverse engineers a model from a running Snowflake warehouse?

SqIDBM is a disconnected environment from your Snowflake DW. It creates versions for your changes after you RE. If someone made changes in Snowflake after you RE to SqIDBM, then we allow Reverse Engineer on Top to take care of any new changes. We also allow Alter Script generation to cover changes for your FE.

### 11. Does SqIDBM provide error handling in copy option?

This feature is planned to be released in Q3 2021.

# 12. Is there a possibility to do the lineage between objects and how does it behave in the case of calculated fields?

This feature is planned to be released in Q3 2021, and will show lineage for any columns in Views and Tables.

### 13. Does SqIDBM allow you to source control the DDL changes?

Yes, we have our native version control and we are currently working on GIT and Azure DevOps integration (which will be released by the end of Q2 2021).

### 14. SqIDBM has a PRIMARY KEY constraint; is it only for informational purposes?

We support both - actual Primary Key constants that enforce referential integrity for those customers who need it and virtual relationships (information purposes only where referential integrity is omitted). From a Snowflake specific perspective, yes - it's for informational purposes. It can be very useful when, for example, a Snowflake data model is reverse engineered in terms of understanding the data model, or when using BI tools on a Snowflake data mode.

15. Can you recommend any good books or training resources for staff new to data modeling? The best I know of is "Designing Quality Databases with IDEF1X Information Models" by Thomas Bruce, Dorset House 1991. Thirty years old! We would recommend the following books to get started:

### • General Introduction to Data Modeling Database Systems

Database Systems: A Practical Approach to Design, Implementation, and Management by Thomas Connolly, Carolyn Begg, 6<sup>th</sup> Edition (Chapters 4 – 19)

### • Data Vault

The Elephant in the Fridge: Guided Steps to Data Vault Success through Building Business-Centered Models by John Giles, 1<sup>st</sup> Edition

### Dimensional Modeling

Relentlessly Practical Tools for Data Warehousing and Business Intelligence Remastered Collection by The Kimball Group Reader, 2<sup>nd</sup> Edition

# **16.** Is the comparison only at table/view level? Or will it look at all objects (stored procedures, file format, sequences, etc.)?

Currently, we support the following Snowflake objects:

- Tables
- Views
- File Formats

In Q2/Q3 2021, we will support Functions, External Tables, Stored procedures, Sequences, etc. Those will also be supported in our Compare feature.

### 17. Can the sync between environments be run from a CI/CD pipeline?

We are currently working on GIT and Azure DevOps integration (which will be released by the end of Q2 2021).

### 18. How can SqlDBM work in collaboration with dbt?

Our customers use both solutions at the same time. Please see our article on Medium regarding how they can be used here.

#### 19. Is there support for "Logical Designing" as well?

Yes, we do support both Physical and Logical, along with naming conventions and glossaries.

#### 20. How do you run the data pipeline in Snowflake? Can it be automated?

SqIDBM only touches Metadata and is used for Model management purposes only. Also to note, Snowflake Tasks are an option, and, alternatively, enterprise orchestration tools (e.g. Apache Airflow) are well-suited to Snowflake Data Pipeline execution.

**21.** How do you add connections and how do you get the icon to execute code on a specific database?

You provide both ways for Reverse Engineering: (1) SQL Script and (2) Direct Connection.

Please see the attached.

_	REVERSE ENGINEER	Please run the command below: SELECT GET_DDL('schema',"DATABASE_NAME".*SCHEMA_NAME", true);	IMPORT OPTIONS »
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# **22.**Are certain features, such as team comments and DataOps, available by default in SqIDBM or do we need to get any special license?

Certain features, including but not limited to the above-mentioned features, are only made available on our Enterprise Plan. Take a look at our pricing page here to see which plans have which features and functions.

### 23. Where are the model definitions stored?

In AWS S3. In the Oregon region.

# 24. Is SqIDBM and its features common across different databases or do we need to get any special access based on the databases we choose?

There are restrictions for certain database types – for example, our Basic plan only supports non-cloud based databases. Take a look at our pricing page here to get an overview of the plans and their features.

### 25. How does SqIDBM handle private data and public data?

SqIDBM only accesses and stores metadata - no data within your database itself.