



# CLOUD ANALYTICS CONFERENCE

LONDON



[@SnowflakeDB](https://twitter.com/SnowflakeDB) [#CloudAnalytics17](https://twitter.com/CloudAnalytics17)

# This Afternoon....

- 5 Ways to Enable BI in the Cloud – (High level summary)
- Optimizing Your Analytics with Tableau and Snowflake – (Detailed BI content)
- Utilizing Snowflake's Architecture to Support BI – (Detailed Snowflake content)
- Start Ending Your Data Struggle (30 Day Guide)



# Optimizing Your Analytics with Tableau and Snowflake

Alexander Ross, Tableau

Ross Perez, Snowflake

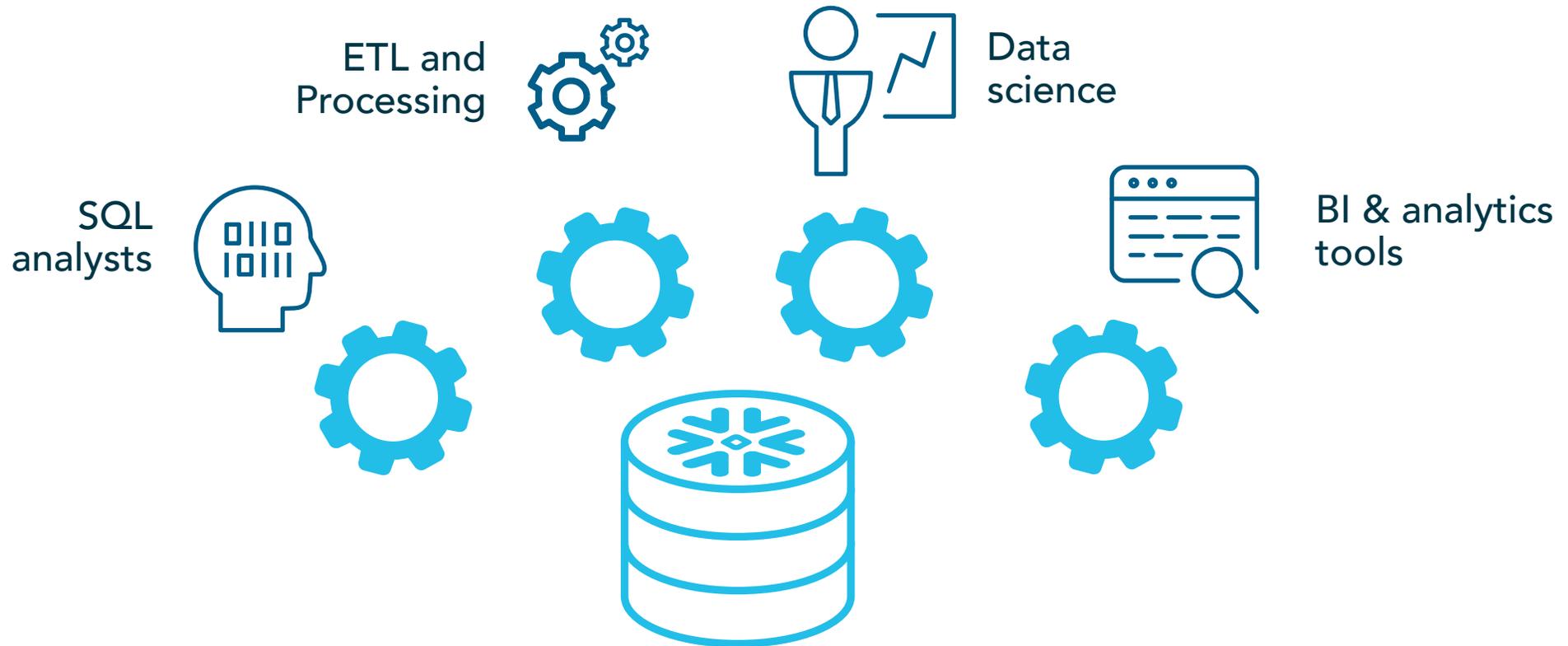
6/1/2017



# Optimizing Your Analytics with Tableau and Snowflake

- Step 1: Enable independent connectivity to data
- Step 2: Support repetitive queries
- Step 3: Use the tools at your disposal to troubleshoot
- Step 4: Improve ad-hoc queries

# Enabling independent connectivity to data

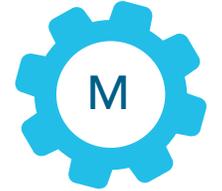


# Enable independent connectivity to data

ETL and Processing

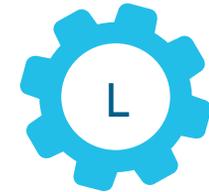


Always On



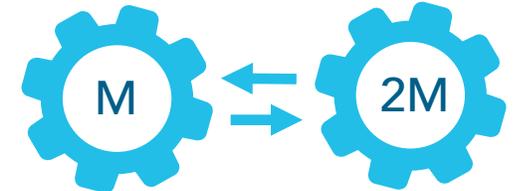
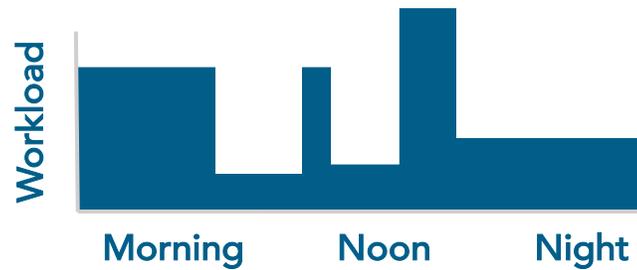
Autosuspend/Resume

SQL analysts/BI manager



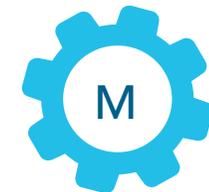
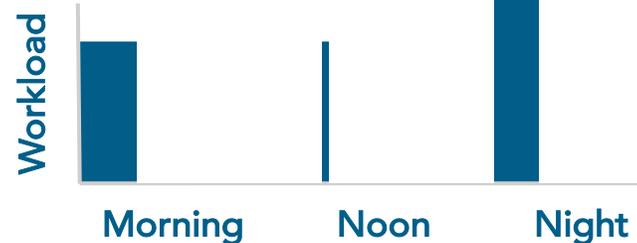
Autosuspend/Autoresume

Reporting



Autoscale

Ad-hoc analytics



Autosuspend/Autoresume

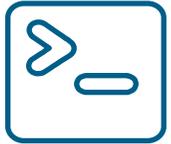
- Creating a warehouse
- Sizing a warehouse
- Auto-suspend
- Auto-resume



# Supporting repetitive queries



Sales team looking at quota data



Engineering analyzing bugs



Marketing evaluating website traffic

Defining characteristic: someone will need to use this data again

# What people with repetitive queries need

- Up-to-date data
- Accurate calculations
- Simplified fields and metadata

# Why avoid in-memory



Extracts and in-memory connectivity  
hard to keep sync and manage

Driven by poor database performance

Focus on enabling direct  
connectivity and curating "real"  
data

# Curating direct connectivity



- Database level
  - Permissions



- View level
  - Global calculations
  - Complex calculations
  - Field reduction



- Tableau level
  - Groups
  - One-off calculations
  - Aliases
  - Folders
  - Hierarchies

- Permissions
- Creating a view
- Tableau: Field level metadata



# Use the tools at your disposal to troubleshoot

- Query performance troubleshooting checklist
  - Run the associated query (keep in mind whether or not it's being cached)
  - Step 1: Take a look in Snowflake History
  - Step 2: Take a look at Tableau performance recorder
  - Step 3: Evaluate difference in query performance
    - If Tableau >>> Snowflake, investigate on BI side
    - If Tableau > Snowflake, investigate on Snowflake/query side

- Tableau Performance Recorder
- Snowflake history



# Improving ad-hoc queries

- What slows ad-hoc queries down?
  - Unfocused questions -> need more of the table
  - Disaggregated measures -> every value has to be returned
  - Groups and LOD calculations

# Creating efficient ad-hoc queries

- What slows ad-hoc queries down?
  - Unfocused questions -> Filter as much as possible. Use cohorts and sets.
  - Disaggregated measures -> Aggregate measures [sum() avg(), etc]
  - Materialize groups and LOD as calculations

- Filtering in Tableau
- Disaggregating
- Creating a calculation for a group



# Thank You to Our Partners

## Platinum

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## Gold

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