DBeaver Investigation for our Work with Seagate

DBeaver is a tool for connecting to, querying, and managing various databases. It is an open-source application with commercial support. I'm guessing Seagate would be using either the commerical "Enterprise" or "Cloud" version. We (NIST, Northeastern) would probably use DBeaver in the short term to access data for analysis, creating CSV files (or similar) to read into Python applications (or similar). For long-term use, when we are implementing a production solution for Seagate, I'm guessing that we'd skip DBeaver and go straight to running against the DBs using the DBs' native SQL interface (or similar). Anyway, you guys will have to work out those details with Seagate. I think it makes sense to have people doing consulting-like work to start with DBeaver because it is capable of giving us read permission across many DBs without the hassle of dealing with permissions and encryption...or at least that's the way it appears; I'm just learning it today!

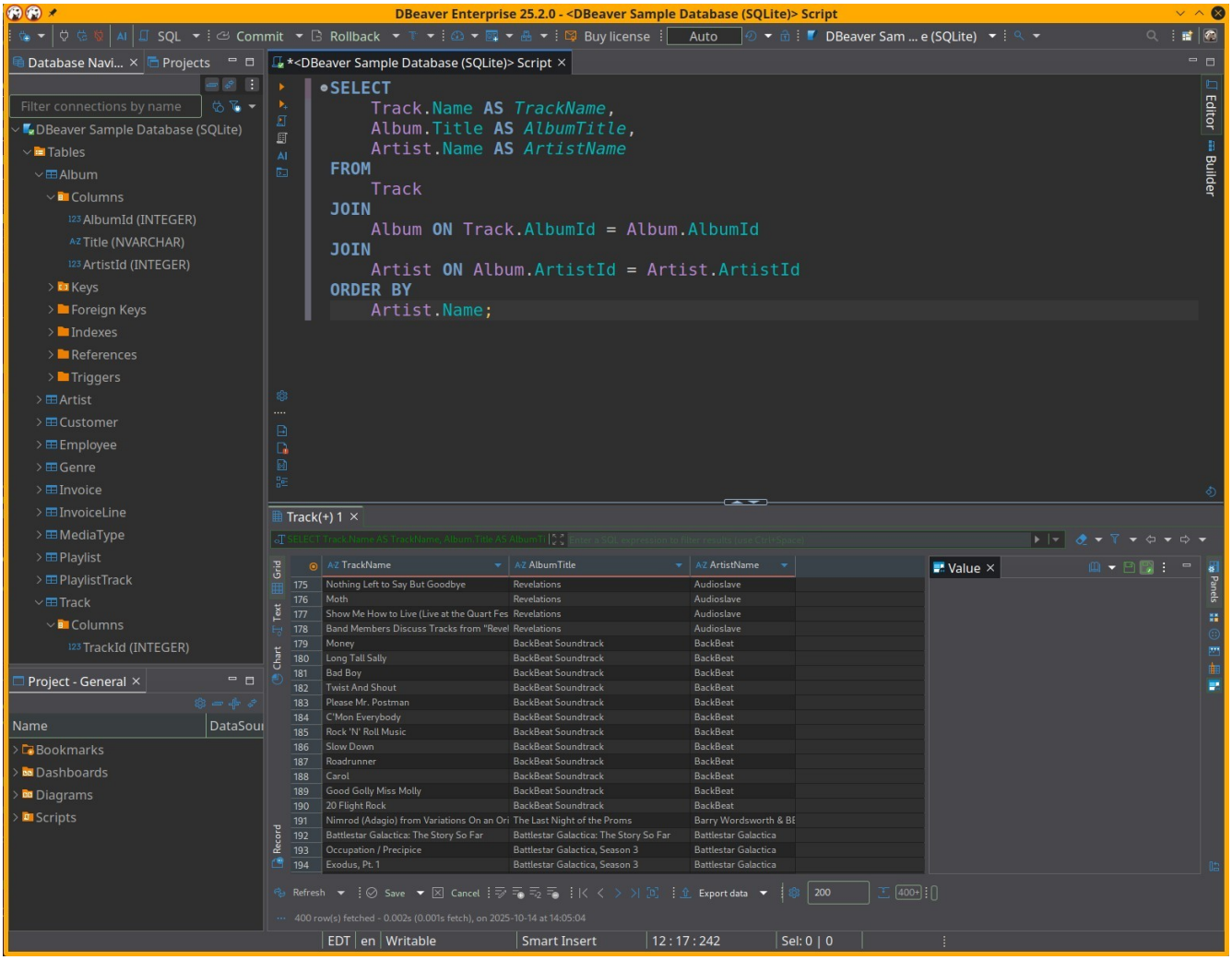
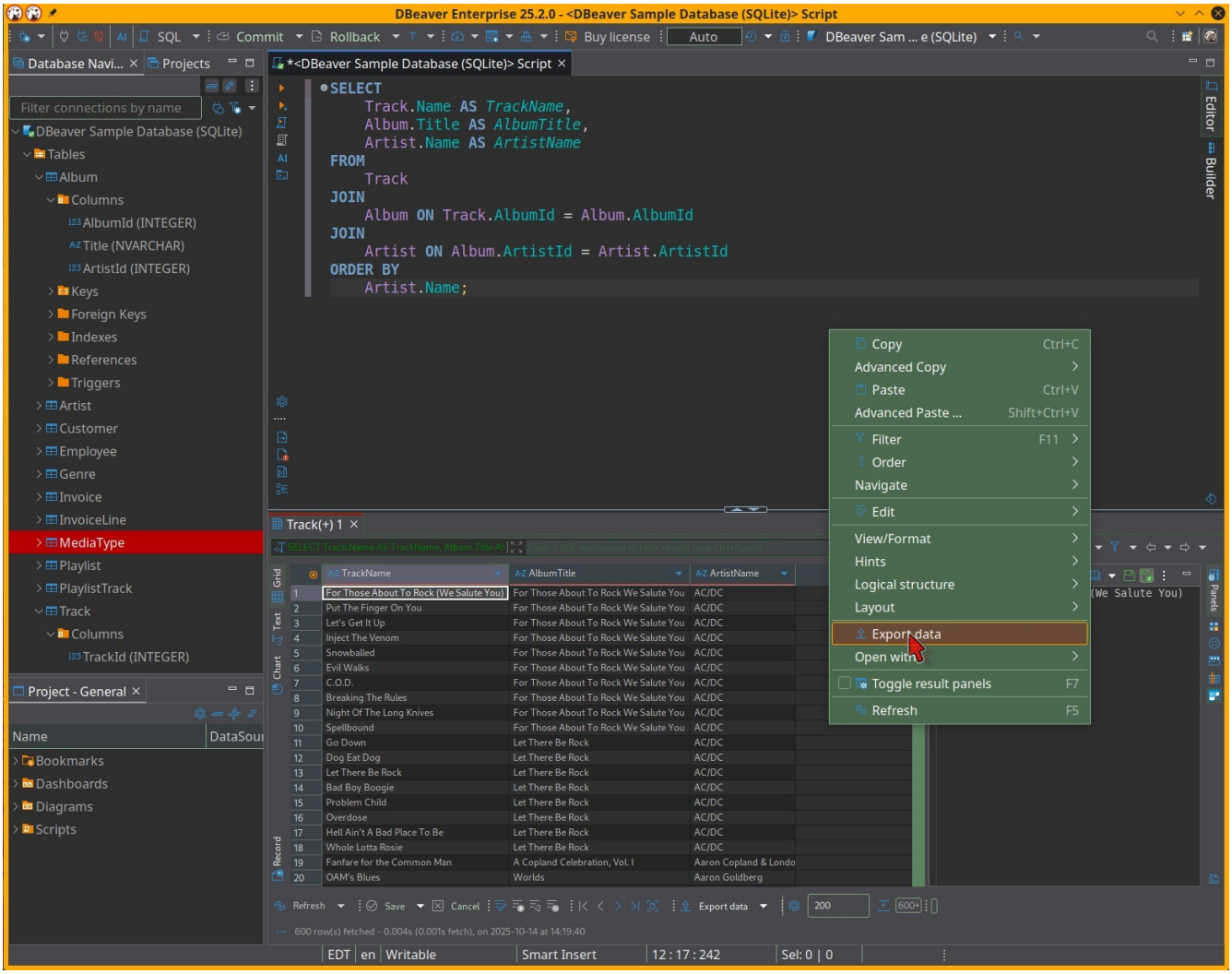


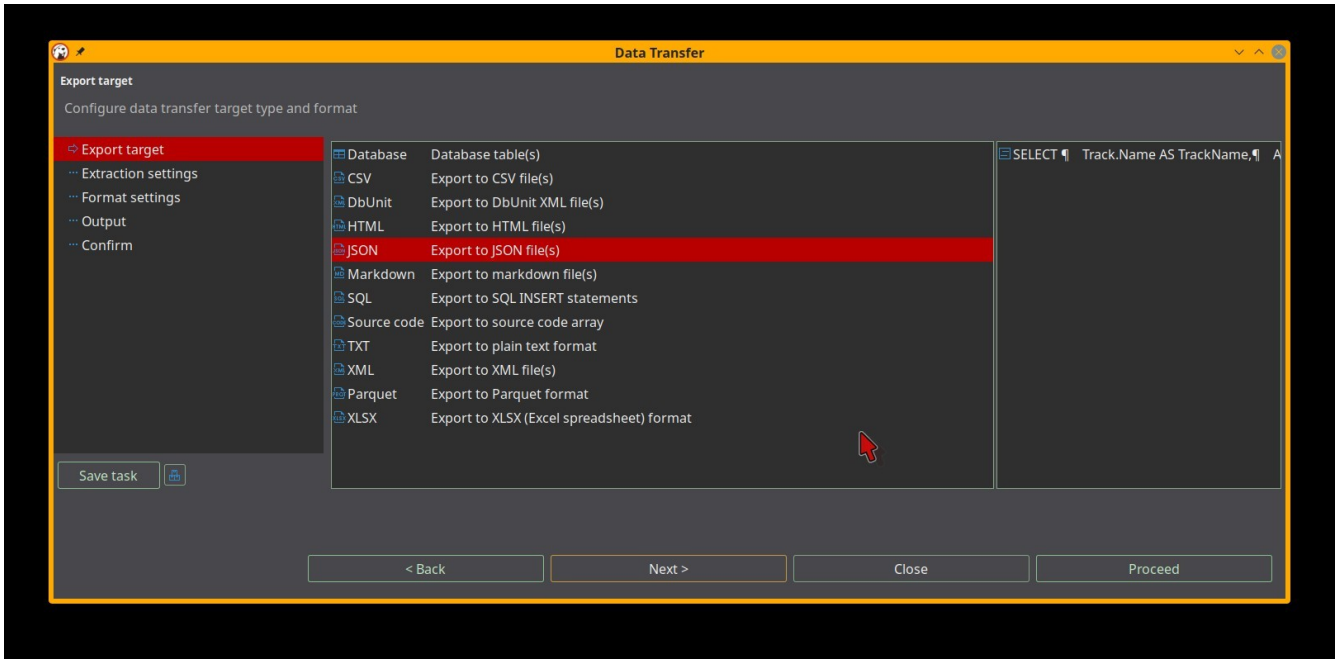
Figure 1: Here I chose the "DBeaver Sample Database (SQLite) found in upper left of the figure. I wrote the SQL at the top center, and ran it using one of the buttons to the left of the SQL editor (hover over those buttons to see what they do). It returned the data in the bottom center.

Though DBeaver has an AI tool to help you write SQL (see the little blue “AI” button to the left of the SQL editing region), I doubt it is active in Seagate’s deployment because it sends the request outside (to OpenAI).e

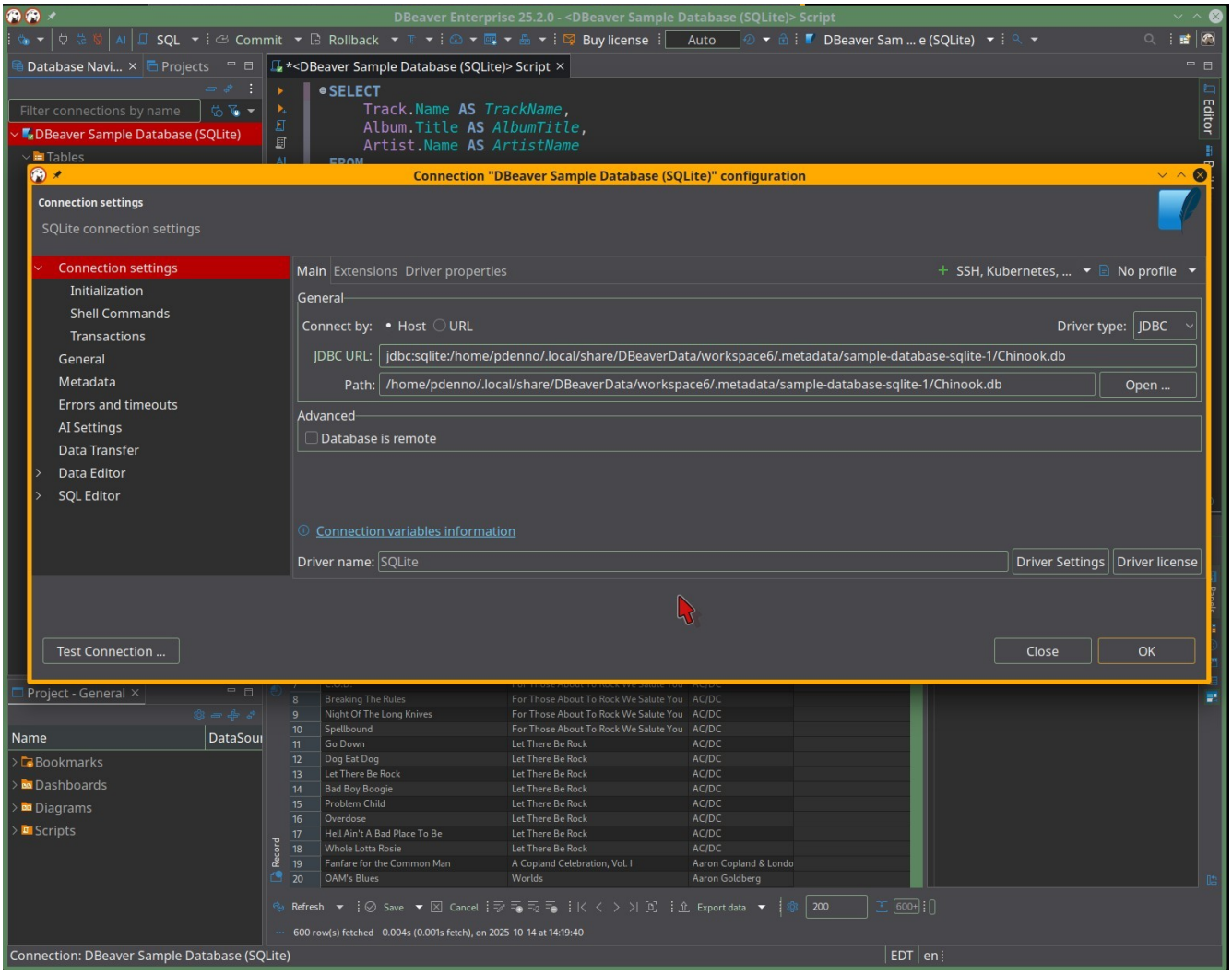
Below I right clicked on the data region and selected the “Export data” menu item to save the result of the query.



There are several dialogs to control how data is written; lots of features.



You can reach the “Connection settings” dialog in the figure below by right clicking on the database (“DBeaver Sample Database (SQLite)” in red in the upper left) and selecting “Edit connection”. For this example at least, the multi-tab dialog provided sufficient information to allow me to connect to the database with an application program. I’ll send an example Jupyter notebook where I connected to this SQLite database with Python.


DBeaver Enterprise 25.2.0 - <DBeaver Sample Database (SQLite)> Script
SQL
Commit
Rollback
Buy license
Auto
DBeaver Sam ... e (SQLite)
Database Navi...
Projects
Filter connections by name
DBeaver Sample Database (SQLite)
Tables
*<DBeaver Sample Database (SQLite)> Script
SELECT
Track.Name AS TrackName,
Album.Title AS AlbumTitle,
Artist.Name AS ArtistName
Editor
Connection "DBeaver Sample Database (SQLite)" configuration
Connection settings
SQLite connection settings
Connection settings
Initialization
Shell Commands
Transactions
General
Metadata
Errors and timeouts
AI Settings
Data Transfer
Data Editor
SQL Editor
Main
Extensions
Driver properties
SSH, Kubernetes, ...
No profile
General
Connect by: Host URL
Driver type: JDBC
JDBC URL: jdbc:sqlite:/home/pdenno/.local/share/DBeaverData/workspace6/.metadata/sample-database-sqlite-1/Chinook.db
Path: /home/pdenno/.local/share/DBeaverData/workspace6/.metadata/sample-database-sqlite-1/Chinook.db
Open ...
Advanced
Database is remote
Connection variables information
Driver name: SQLite
Driver Settings
Driver license
Test Connection ...
Close
OK
Project - General
Name
DataSou
Bookmarks
Dashboards
Diagrams
Scripts
Record
8 Breaking The Rules For Those About To Rock We Salute You AC/DC
9 Night Of The Long Knives For Those About To Rock We Salute You AC/DC
10 Spellbound For Those About To Rock We Salute You AC/DC
11 Go Down Let There Be Rock AC/DC
12 Dog Eat Dog Let There Be Rock AC/DC
13 Let There Be Rock Let There Be Rock AC/DC
14 Bad Boy Boogie Let There Be Rock AC/DC
15 Problem Child Let There Be Rock AC/DC
16 Overdose Let There Be Rock AC/DC
17 Hell Ain't A Bad Place To Be Let There Be Rock AC/DC
18 Whole Lotta Rosie Let There Be Rock AC/DC
19 Fanfare for the Common Man A Copland Celebration, Vol. I Aaron Copland & Londo
20 OAM's Blues Worlds Aaron Goldberg
Refresh
Save
Cancel
Export data
200
600+
600 row(s) fetched - 0.004s (0.001s fetch), on 2025-10-14 at 14:19:40
Connection: DBeaver Sample Database (SQLite)
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