ACF Database (SQLite) Brief Review

Nov. 1, 2024 QAI Inc.

Jean Han

1. Database Type: SQLite

SQLite is a lightweighted database, easy to maintain and query with a simple structure.

2. Scalability:

SQLite can handle the current and anticipated ACF data volume.

Number of Sheets (Pallets)	Database Size
417	557 KB (kilobyte)
0.8 million	1 GB (gigabyte)
0.8 billion	1 TB (terabyte)

3. Tools:

- Python (SQLite) for scripting
- DB Browser user interface for database management
- Terminal for manual updates

4. Technical Knowledge Required: NO

Users just need to ensure the inventory sheet names and contents are correct. Updates, handled by a predefined Python program, will add only new records with pallet numbers higher than those already in the database.

5. Query interface: DB Browser.

DB Browser is user-friendly, making it easy to query and modify records (add, delete, or edit).

6. Update Methods:

- **Manual:** Recommended for infrequent updates. Ensures the Excel file is ready and clean before import and provides clear terminal output for tracking new records. Only need to paste the predefined command into terminal windows.
- Automatic: Can be set up via bash scripts to automate updates but may cause issues if the Excel file isn't ready.