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## Change Request: Enverus Market Data Migration & Ownership Transfer

**Description:** Migrate Enverus API data from the legacy Oracle-based ALLEGRO application (stored in MARKET\_DATA) into AWS QLDB. Replicate the existing PL/SQL logic in an Oracle VM to preserve current processes temporarily. Ownership will formally transfer to my team.

### Planning:

- Confirm all Enverus API endpoints and data structure in MARKET\_DATA.
- Build PL/SQL replication logic for Oracle VM backup.
- Design and deploy AWS QLDB schema.
- Implement secure ingestion and monitoring in AWS.
- Review and validate with stakeholders.

**Justification:** The current integration is maintained by ARCH's legacy IT team, which will retire from support duties effective January 1. The process lacks visibility, flexibility, and cloud integration. This migration brings the system under my team's full ownership, ensuring it is governed, scalable, and aligned with our AWS-first strategy.

### Implementation Plan:

1. Build PL/SQL script to replicate Enverus API pull into Oracle VM.
2. Design QLDB schema matching MARKET\_DATA structure.
3. Create ingestion flow (Lambda, Step Functions, etc.) into AWS.
4. Establish monitoring and data validation.
5. Finalize testing and cutover.

### Risks and Impact Analysis:

- QLDB adaptation required: Relational logic may need adjustment.
- Data delay risk: Dual systems will reduce exposure during cutover.
- Impact: Minimal on users; legacy process will remain online until QLDB is validated.





**Backout Plan:** Retain the Oracle VM replication path as a hot standby. Revert data consumers to the current MARKET\_DATA table if needed.

**Test Plan:**

- Reconcile row counts and sample values between Oracle and QLDB.
- Simulate failures to ensure fallback to Oracle VM works.
- Confirm AWS data freshness and completeness against source.

**Planned Implementation Start Date:** TBD – Pending architectural approval and security review.

**Planned Implementation End Date:** TBD – Targeting 2–3 weeks after greenlight.

**Data Fields and Tables Needed**

- Oracle Table: MARKET\_DATA
- Enverus API schema documentation
- Full index retrieval example(s)

**Data Diagram:**

- Pending. High-level flow:
- Enverus API → Oracle VM in AWS → AWS QLDB

**Architectural Diagram:** Pending. Will include API ingestion, Oracle replication, and QLDB pipeline with system boundaries and failover path.

**Submitted and Owned by:**

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