Based on the provided source files, particularly the architectural blueprints for the Realco OS and Antigravity integration, here is the executive design decision matrix for your V1 release.

1. Source of Truth Stack for V1

Decision: Hybrid Architecture (Option B-Lite) While the long-term goal is a fully synced Canonical Postgres 1, 2, for V1 we will adhere to the principle defined in the blueprint: **"Base44 is the truth the app operates on, Databricks is the truth the market provides"** 3.

- **Operational Data (Writes):** Users, Leads, Deal Pipeline, and Active Listings live in **Base44 (Postgres/Firestore)**. This allows for immediate CRUD operations and high-speed interaction 3.
- **Market Intelligence (Reads):** The app reads directly from **Databricks Gold Views** via the Model Context Protocol (MCP). We do not duplicate 15 years of DLD history into Postgres for V1; we query it 3, 4.

2. Authentication: Private Genie

Decision: Google Workspace OAuth (Allowlist) To align with the Antigravity ecosystem and the "private genie" requirement, we will use Google OAuth.

- **Mechanism:** Secure agent access using OAuth credentials integrated with Google Workspace 5, 6.
- **Policy:** Strict allowlist for the initial rollout (e.g., irfan@realcocapital.ae, umer@...). This avoids the complexity of managing custom password hashes in V1 while leveraging the "Non-Human Identity" concepts for the agents themselves 7, 8.

3. Databricks Connectivity Method

Decision: Create MCP Server from Scratch You must configure the **MCP Server** for Databricks.

- **Reasoning:** The architecture relies on the Model Context Protocol (MCP) to act as the "intelligent backbone" connecting the Antigravity IDE to the Databricks Lakehouse 9.
- **Action:** We will use the "MCP Toolbox for Databases" 5. This allows your agents to "see" the Unity Catalog schemas and execute SQL queries (e.g., get_villas_count) without manual CSV exports 9, 10.

4. "Gold Enough" Tables for V1

Based on the "Gold View" definitions in the source material, these are the minimum viable tables required to ship V1 without hallucination:

1. **workspace.dld_gold.transactions_export**: The cleaned, freehold-only transaction history enriched with project names 11, 12.
2. **workspace.dld_gold.buildings_freehold**: The master list of properties/buildings used for normalization 13.
3. **Unit (Canonical)**: The atomic operational entity in Base44, linked to the Databricks history via unit_code 2, 14.

4. **Contact (Network)**: The consolidated identity for Buyers/Sellers, deduped from Monday/Pixxi 1, 15.
5. **Deals**: The "WON-only" pipeline that confirms revenue and converts Contacts to Clients 16.

5. V1 UI Scope (Thin Slice)

To follow the "Fast Search → Instant Trust" principle 17, we will limit V1 to **Screen A** and **Screen B**:

- **Screen A: Inventory Intelligence (Unit Search → Profile):** Map-first search with filters (Zone/Area) leading to a "Truth Card" for a specific unit. This validates the "Unit-level truth over averages" doctrine 18, 19.
- **Screen B: Market Area Dashboard:** A read-only view displaying price trends (PPSF), volume, and velocity for specific Areas/Communities, pulled directly from Databricks Gold views 19, 20.

Note: Contact 360 is critical but secondary to establishing the Data Spine.

6. Zone Layer Rules

Decision: Placeholder Taxonomy (5 Zones)

- **Rule:** Zone names are business-defined and must not be inferred by the AI 14, 21.
- **Implementation:** We will initialize the system with **5 Unresolved Zone Placeholders** (e.g., Zone_01 to Zone_05).
- **Action:** You must explicitly map Areas to these Zones in the Governance & Intelligence Control module. The system will strictly enforce Zone → Area → Master Project → Project → Unit hierarchy 14.

Immediate Next Step

Execute **Phase 1: Infrastructure & The "Context Lake" Setup** as outlined in the previous response.**Command to Agent:** "Initialize Realco-OS-Core, configure the MCP connection to Databricks, and validate read-access to workspace.dld_gold.transactions_export."