Ocuply: Autonomous Architecture and Digital Sovereignty Report 2026

1. Executive Summary of the System

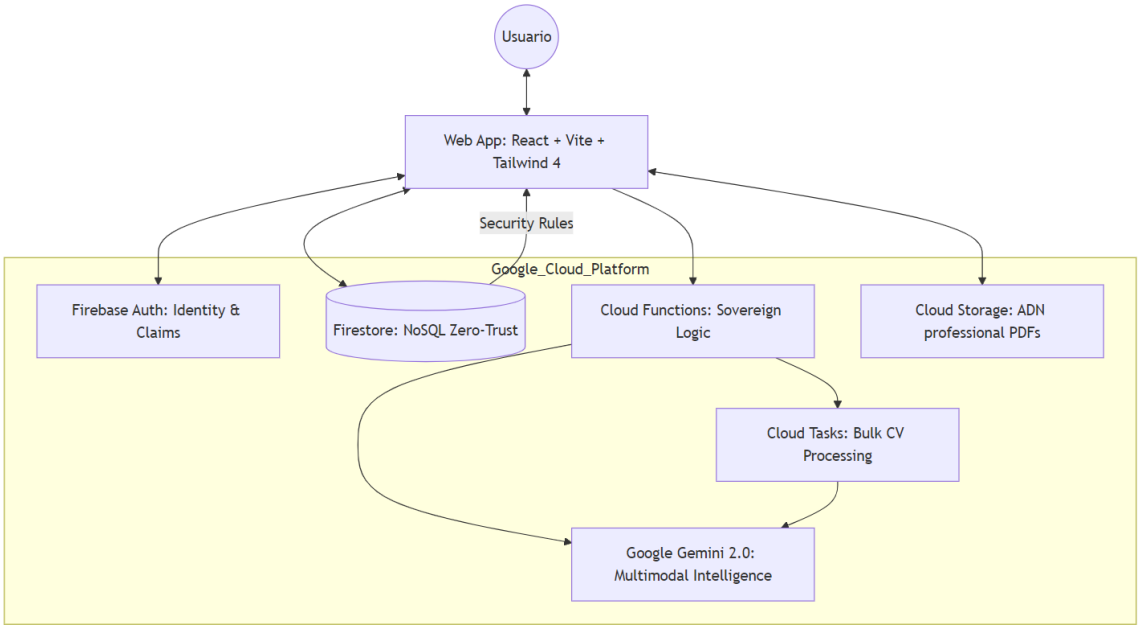
Ocuply is a platform for career acceleration that breaks with the traditional model of job consulting. Its core is based on an efficient processing architecture (Client-Side Intelligence). Unlike other options that rely on static databases or slow intermediaries, Ocuply works as an autonomous ecosystem developed under the Antigravity methodology. This allows the user to maintain control of their information, eliminating waiting and offering an instant response that the conventional backend cannot match.

Ocuply's power comes from its direct integration with Google Cloud Platform (GCP). We used the '@google/genai' library to connect with Google Gemini, leveraging its multimodal reasoning to act as a high-level career strategist. By scaling on Firebase and Google managed services, we ensure real-time synchronization and enterprise security. This union allows Ocuply to not only analyze profiles, but to run deep diagnostics and simulations with an accuracy that surpasses generic AI engines.

The real benefit to the user is an "end-to-end" tool where AI actively assists in every technical step. Ocuply offers a real Match Score between the profile and the vacancies, injecting improvements directly into the editor. Being on GCP, we ensure global scalability and 99.9% availability. Ocuply isn't just an AI app; it's a strategic infrastructure that uses the best of Google to transform the future of work.

2. High-Level Architecture Diagram (GCP Synergy)

This visualization details how Ocuply orchestrates Google Cloud services to create a serverless, secure, and scalable infrastructure.



3. Technical Specifications and Engineering Pillars

A. Artificial Intelligence and Prompt Orchestration (AI Proxy)

Ocuply implements an Intelligence Proxy pattern. The logic of the prompts (*System Instructions*) never resides on the client.

- Intellectual Property Shielding: Master prompts are injected at runtime from Firestore to Google Gemini using proprietary middleware. This prevents the behavior of the "Brain" from being exposed or reverse-engineered in the browser.

- Thinking Budget & Resilience: The system handles reasoning budgets and dynamic temperatures. In the event of degradation of the LLM service, the system activates "Neural Link Severed" protocols, prioritizing response integrity over speed.

B. Zero-Trust Security and Attribute Firewall

We adopt an absolute defensive posture (*Secure-by-Design*). The system assumes that the customer may be compromised.

- Symmetric Filtering (affectedKeys): Firestore security rules act as a surgical firewall. They analyze the difference ('diff') between current and incoming data. Any attempt to inject AI credits or escalate privileges (e.g., change a role to ROOT) is instantly detected and blocked by the GCP engine (Error 403).

- Multi-tenant isolation: Each organization (Tenant) operates in a logical silo. Security rules ensure that even through malicious scripts a user from Agency A cannot see data from Agency B.

C. Native Printing Vector Engine (ATS-Friendly)

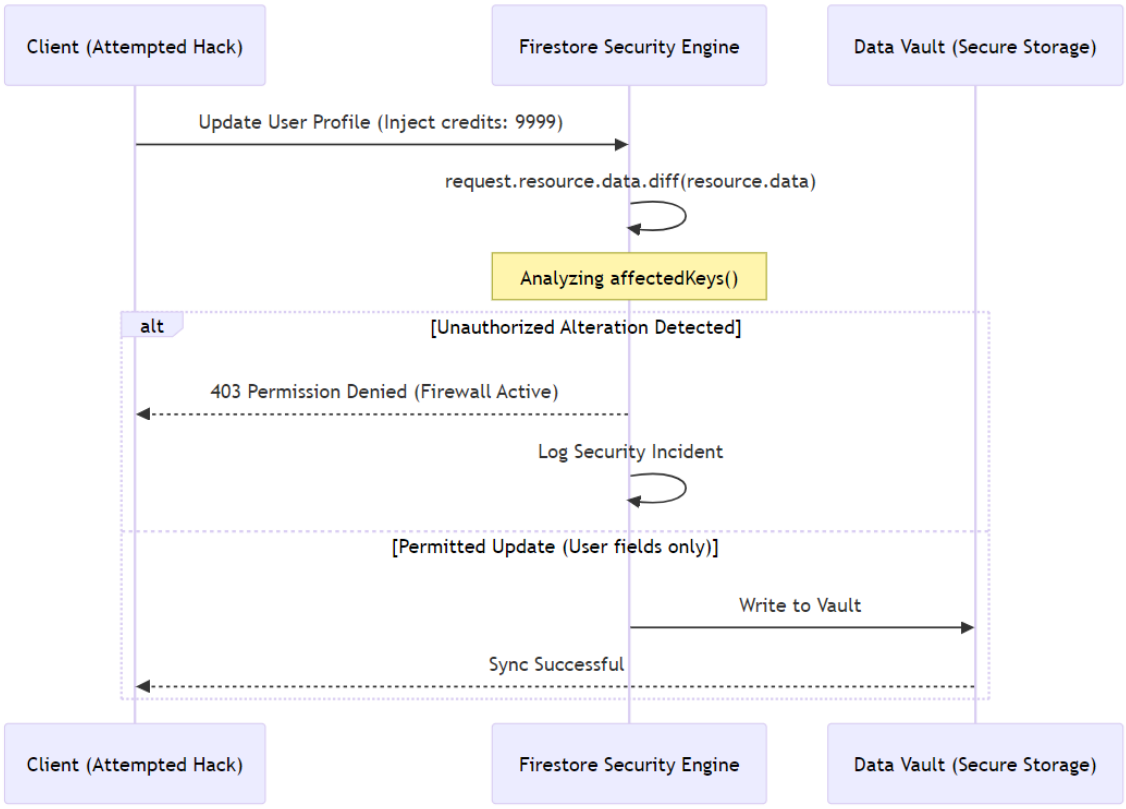
Unlike competitors who use rasterization (text images), Ocuply uses a High-Definition Native Print Bridge.

- Semantic Preservation: We clone the DOM tree into a sterile iframe and apply native print styles. When exporting to PDF, the result is 100% vector. This is critical for applicant tracking systems (ATS), as the text is perfectly readable by companies' AI spiders, ensuring sharpness at any zoom level.

4. Dynamic Data Streams

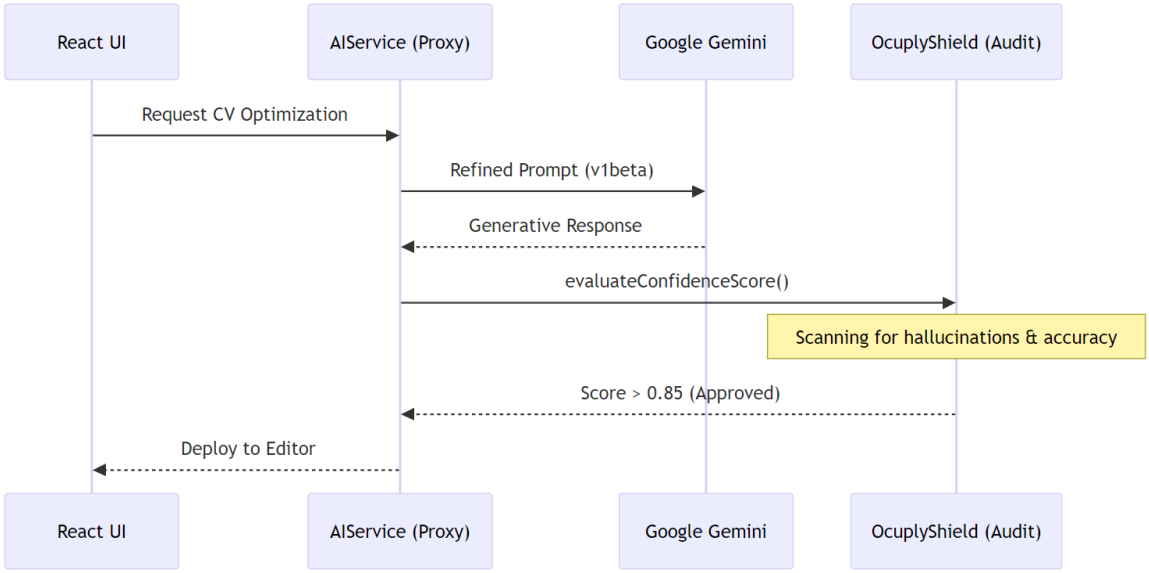
Security Protocol: Attributes and Transactions

We don't just validate who the user is, but what exact parts of the document they're trying to touch.



AI Intelligence (L2-Shield)

Every Gemini answer goes through a trusted filter before reaching the user.



5. Scalability and Bulk Jobs

For HR agencies handling hundreds of profiles, Ocuply uses an asynchronous queuing architecture on top of Google Cloud Tasks.

1. Registration: The user uploads a batch of documents.

2. Breakdown: A Cloud Function breaks down work into individual tasks.

3. Parallelism: Cloud Tasks runs dozens of concurrent Gemini extracts.

4. Persistence: The results are written atomically to Firestore, notifying the UI in real time via 'onSnapshot'.

6. Roadmap Towards One Million Users

Our 2026 vision for Google's infrastructure:

- ZKP Integration: Implement zero-knowledge digital signatures to validate professional certifications without exposing personal data.

- Agentic Automation: Evolve from an assistive AI to an execution AI that can bid following the user's sovereign criteria.

- Edge Intelligence: Move some security processing even closer to the user using Firebase App Check for full perimeter protection.

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