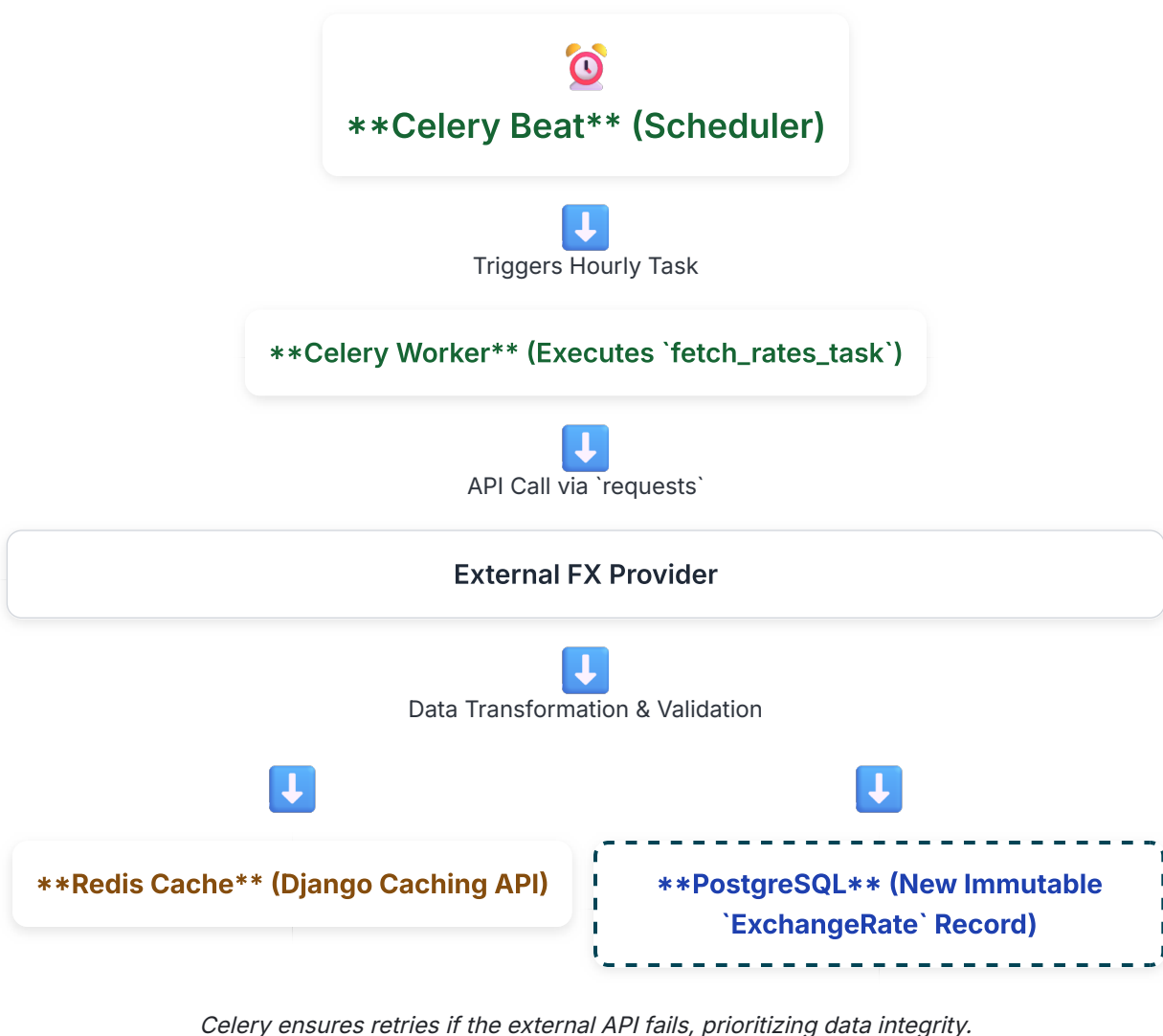


# Simple Currency Exchange Service (CES) - Django/Celery Architecture

Visualization of the two independent data paths: Scheduled Rate Ingestion (Write Path) and Conversion API (Read Path).

## 1. Scheduled Rate Ingestion (Asynchronous Write Path)



## 2. Conversion API (Synchronous Read Path)

**Client Application (e.g., Billing Service)**

HTTPS POST /api/convert

**Django View (DRF Validation, Authentication)****Rate Manager Service (Apply Margin, Conversion)****\*\*Redis Cache\*\* (Rate Lookup - Priority Read)**

(Fallback to PostgreSQL if Cache Miss)

**\*\*PostgreSQL\*\* (Insert `ConversionAudit` Record)**

Returns Converted Amount (200 OK)

**Client Application***The API ensures low latency via Redis and logs every action for reconciliation.*