Zero-Ops, Always-Fresh Shopify Data Pipeline

Overview

A fully managed FastAPI + Cloud Run service with nightly backfill jobs, secure OIDC invocations, and health monitoring. Brands get trusted data by 6am, with no servers, no cron drift, and no manual backfills.

Business Value

- ↓ 70–90% engineering time vs. DIY ETL
- ↑ Reporting reliability to 99.9%+
- \downarrow Time-to-insight from weeks \rightarrow days
- \$25-60k annual savings per brand

How it works

- Cloud Run runs the FastAPI backfill service
- Cloud Scheduler (with OIDC) triggers jobs securely at 2am/3am daily
- Idempotent endpoints allow replays & corrections
- Logs in Cloud Logging, metrics in BigQuery (extensible)

Starter Package

- Orders + Products sync nightly
- /health endpoint monitoring
- 2-week pilot with daily dashboards