Forecast Pipeline Testing & Validation

Finanzas SD – Architecture, Flows & SOPs

Arquitectura, Flujos y Procedimientos

December 23, 2025

1 Forecast Pipeline Testing & Validation

Date: December 11, 2025
Status: Fixed - Ready for Testing

1.1 Executive Summary

Fixed critical data structure mismatch causing forecast, portfolio, and cost catalog screens to show "all zeros". The issue was seed scripts creating DynamoDB records with pk `PROJECT#{id}#MONTH#{month}` while handlers queried with `PROJECT#{id}`.

1.2 Root Cause

Problem: Partition key mismatch - Seed: `pk = PROJECT#P-CLOUD-ECOPETROL#MONTH#2025-01` - Query: `pk = PROJECT#P-CLOUD-ECOPETROL` - Result: Query returns 0 items

Fix: Changed seed scripts to use `pk = PROJECT#{id}`, `sk = ALLOC#{month}#{id}`

1.3 Testing Instructions

```
[] cd services/finanzas-api
# Reset and reseed npm run reset:dev-projects -- --force # TODO: seed:canonical-projects script has been removed. # Create test projects through the application UI before validation.
# Validate npm run verify:allocations npm run verify:payroll npm run verify:forecast-pipeline P-CLOUD-ECOPETROL
```

1.4 Expected Outcomes

All 5 critical screens should show non-zero data: 1. Forecast: 12-month grid with data 2. Cost Catalog: Rubros with costs 3. Portfolio: MOD charts 4. Reconciliation: Invoices load 5. Changes: Line items work

1.5 Test Projects

- P-CLOUD-ECOPETROL ($22.5M, 48mo)
- P-DATACENTER-ETB ($25M, 60mo)
- P-NOC-CLARO-BOG ($18.5M, 60mo)
- P-WIFI-ELDORADO ($4.2M, 24mo)