REACTIVE FIX-IT TO AUTONOMOUS SELF-HEALING:

AI-DRIVEN IMPORTER BREAK-FIX — ZERO ENGINEER BOTTLENECK

ESG Data Platform | Cloud & AI Operations Transformation

INFLECTION POINT

- 40+ utility importers requiring constant break-fix when sites change — selectors, flows, anti-bot — hitting paying meters and causing fetch bill failures
- Slow cycle time: engineer triage, reproduce, fix, Docker test, open PR, deploy — under pressure with scattered context across JIRA, errors and credentials
- Credential & webhook risk: secure login handling, no secrets in logs, trust boundary to prevent cost abuse or junk queue injection
- Ops complexity: service runs alongside large importers checkout, Docker rake fetch, git/SSH/PR automation, and ECS — not a simple Lambda-style app

EXIQO™ ENGINEERED FIX

OptimaAI Platform: Ruby/Sinatra self-healing service — Workato HMAC-signed webhook enqueues JIRA work; TaskRunner spawns an autonomous Claude Code CLI agent in the importers repo; architected alongside existing checkout with Docker/rake fetch and git/SSH/PR automation; ECS/Terraform planned for production

Context Engineering: JIRA webhook supplies task context; credentialRef fetched from Redis (WegoCrypt encrypted, out-of-band) and env-injected — never inline; agent clones repo, diagnoses and patches the gatherer; log scrubbing ensures secrets never surface in logs or agent output

AI SDLC Playbook: Agent patches gatherer → runs rake fetch in Docker as verification gate → pushes branch → opens PR; HMAC signing + replay window with gated endpoints; prompt guardrails enforce Docker-only verify, no credential leaks, and a defined ship path

AI-EV Program: Lean team of 3 Builders, DevOps (ECS/Terraform/SSM), PR review; agent handles inspect/fix/verify; Builders retain merge, deploy, and risk ownership; SPEC/README/ADRs + PR + JIRA comment + ticket transitions form the full audit path

120

HRS / WEEK, Engineer time saved — senior staff freed from the full break-fix loop

4

DAYS TO FIX
Down from ~3 months — fix no longer human-dependent