CloudWinks

CLOUDWINKS · BUSINESS, FINANCE & COMMERCE

BeanCounter

Technical brief

BeanCounter keeps the books for companies and for people who keep personal books. It is a double-entry ledger with multi-dimensional accounting, bills and invoices, bank reconciliation, budgets and the core financial reports, and every other CloudWinks app that moves money posts into it.

1. Architecture in brief

BeanCounter is a Financial app with both personal and company tenancy. Every row carries an owner, which is a Crux company or, for personal books, a Crux person; each company in a group is its own owner, and consolidation is a read-only report across the owners a user may see, with no separate entities table. Tables use the bean_ prefix, and the long table names are shortened so that every generated database name stays within PostgreSQL's 63-byte limit. Customers and vendors are extensions of Crux persons and companies with their own keys. Balances, aging and statements are computed by server views and functions rather than stored.

2. Service boundary and intake

Journal entries are posted through one named posting function that checks the entry balances, refuses dates in a closed or locked period, and is idempotent on the source record, so TjingTjing payroll runs, Zibit company wallet movements and LandMan rent schedules each post exactly once. DreamDrafter pushes one owner-chosen plan scenario into budgets through a separate idempotent function and never writes actuals. Bank statement lines arrive from bank CSV files and from live bank feeds through TheIntegrator, and daily automatic match proposals wait for an accountant to accept them. Sample QuickBooks data can be loaded server-side through TheIntegrator mappings, each company into its own books. Recurring entries are Conductor schedules that call a BeanCounter function.

3. Data handled

The model holds accounts, transactions and transaction lines, allocation rows (dimension type, target class, target record and an amount or percentage, with cost codes as one dimension type), cost codes, bills, invoices, payments and payment splits, per-owner payment terms, effective-dated rate cards for cost and bill rates, bank accounts, statement lines, match proposals and reconciliations, budgets and budget lines, fiscal periods with OPEN, CLOSED and LOCKED states, and recurring templates. Money is stored with a Crux currency code on every row; exchange rates are stored only when given, never inferred. Accrual figures are stored and cash-basis reports are derived. Credit cards and loans are bank-account categories with a due date and a limit; equity and draws are Equity accounts. Tax codes use Crux ISO 3166 jurisdiction codes. Employee expense reimbursements are bills to the employee's Crux person, paid outside payroll.

4. Integrations and ownership

Crux supplies persons, companies, currencies and jurisdiction codes. KeyKook holds bank numbers, IBAN, SWIFT, routing numbers and tax ids in its vault and gates roles. TjingTjing (locked payroll runs), Zibit (company wallet movements tagged with a spending-category cost code), LandMan (rent schedules) and DreamDrafter (budget push and plan-against-actual) connect through named functions. TaskMaster and TimeTracker reference BeanCounter cost codes. TheIntegrator carries the QuickBooks load and the bank feeds, Conductor runs recurring entries, TheReporter presents consolidated reports, WatchDog holds tax-authority details and filing deadlines, and TaskMaster carries the month-end close task.

5. Security and access

Every table is owner-filtered and nothing is granted to PUBLIC. Bank account numbers, IBAN, routing numbers, SWIFT codes, external bank ids, vendor banking details and tax ids are masked and live in the KeyKook vault; a reveal needs a KeyKook role and is logged. A closed period can be reopened only by a BeanCounter administrator, and the reopening is logged; a locked period is never reopened. Embedded controls in other apps run with the embedding person’s own BeanCounter roles. QuickBooks extracts are encrypted before any real load, and SSNs and tax ids never sit in BeanCounter tables.

Competitive context

ALTERNATIVE	ITS FOCUS	CLOUDWINKS PRODUCT FOCUS
QuickBooks Online	Small-business accounting with class and location tracking and budget-against-actual reports.	Unlimited dimensions per line by amount or percentage, and postings from payroll, wallet, property and planning apps in one ledger.
Xero	Double-entry accounting with two tracking categories, multi-currency and bank feeds.	One ledger per company in a group with a consolidated read-only view, built on shared CloudWinks identity and access.

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