RunMyBusiness ERP — Comprehensive User Manual & Operational Guide

Document Control & System Metadata

- **Application Name**: RunMyBusiness (RMB) Cloud ERP
- **Release Version**: 1.0 (Production)
- **Default Production Host**: `http://100.106.122.22:8000` (Tailscale VPN Network)
- **Core Technologies**: FastAPI (Python), SQLite / WAL Mode, Vanilla HTML5 / ES6 JavaScript Single Page Application (SPA), Playwright Automated Test Harness.
- **Accounting Engine**: Full Double-Entry General Ledger (Debits = Credits Enforcement), Accrual Basis with Real-Time Cash Reconciliation.
- **Document Purpose**: Authoritative end-to-end user manual, operational procedures, marked-up UI control reference, and role-based workflow documentation for all company personnel.

Table of Contents

1. Introduction & System Architecture
2. User Roles & Permission Matrix (RBAC)
3. System Navigation & Interface Overview
4. Executive Dashboard & Financial Action Center
5. Chart of Accounts, General Ledger & Opening Balances
6. Customers, Invoicing & Accounts Receivable (AR)
7. Vendors, Purchase Bills & Accounts Payable (AP)
8. Items & Services Catalog
9. Banking, CSV Statement Import & Bank Feed Reconciliation
10. Manual Journal Entries & Recurring Templates
11. Financial Reporting & Core Financial Statements
12. Commissions Management & ADP Payroll Integration
13. Customer Relationship Management (CRM) & Industrial Reliability Sales Engine
    - 13.1 CRM Architecture & Organizational Hierarchy (Corporate HQ vs Plant Sites)
    - 13.2 Decision-Maker Contacts, Temporal Affiliations & Exact Email Deduplication
    - 13.3 Lead Funnel, 1-Day Response SLA & Qualification Workflows
    - 13.4 Activity Tracking, Multichannel Engagement Log & Task Schedules

    - 13.5 Commercial Opportunities, CPQ Proposals, 14-Day PO Clocks & Tolerance PO Matching
    - 13.6 Service Terms, Active Contracted Services, 80% Suspension Rule, 90-Day Renewals & Operations Handoff
    - 13.7 Sales Work Queue, Executive Manager Overview, Universal Omnibox Search & Go-Live Data Migration Importers
14. Company Settings, Security & Period Lock Dates
15. Role-Specific End-to-End Workflow Examples
    - 15.1 Business Owner (`owner`) Workflows
    - 15.2 Accountant / Bookkeeper (`accountant`) Workflows
    - 15.3 Sales Representative (`salesperson`) Workflows
    - 15.4 Operations Director (`operations`) Workflows
    - 15.5 System Administrator (`admin`) Workflows
16. Company Startup Wizard & Historical Data Migration Engine
    - 16.1 Overview & System Migration Lifecycle
    - 16.2 Step 1: Legal Entity Profile & Accounting Cutover
    - 16.3 Step 2: Chart of Accounts & Opening Balance Commit
    - 16.4 Steps 3 & 4: Subledger Ingestion & Migration Suspense Neutrality
    - 16.5 Step 5: Master Items & Services Catalog
    - 16.6 Step 6: CRM Master Data Pipeline Ingestion
    - 16.7 Step 7: Pre-Flight Audit & Go-Live Production Gate
17. Troubleshooting & Frequently Asked Questions (FAQ)

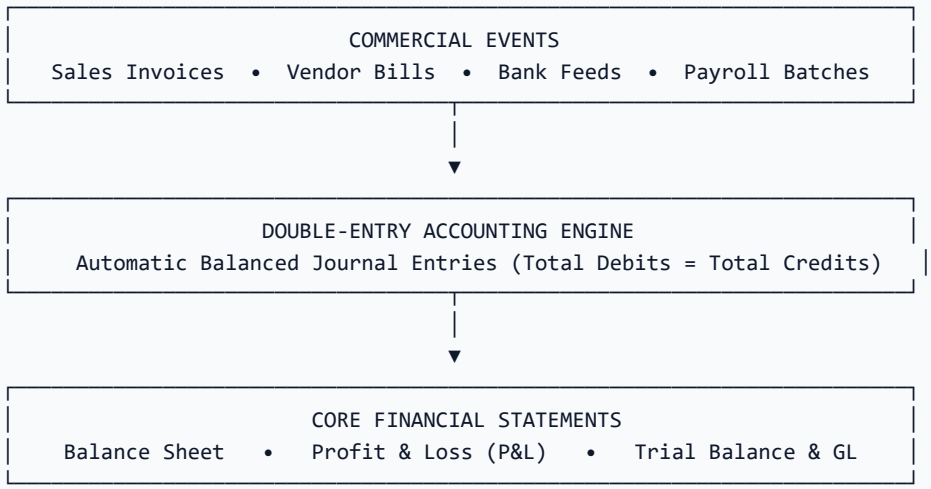
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1. Introduction & System Architecture

1.1 Architectural Vision

RunMyBusiness is an enterprise-grade cloud accounting and business management ERP system built specifically to replace disjointed spreadsheets, external billing portals, and opaque commission calculation sheets with a single, unified double-entry accounting engine.

Every commercial activity—issuing an invoice, collecting a customer check, purchasing inventory sensors, paying a vendor, processing payroll, or calculating salesperson commissions—flows into a strictly balanced General Ledger:



1.2 Core Accounting Principles Enforced

1. **Unconditional Double-Entry Enforcement**: No transaction, invoice, bill, or manual journal can be posted unless `Total Debits == Total Credits` to the exact cent.
2. **Standard 5-Category Account Taxonomy**:
3. **Assets** (1000s): Normal Debit balance. (Cash, Accounts Receivable, Inventory, Equipment).
4. **Liabilities** (2000s): Normal Credit balance. (Accounts Payable, Payroll Clearing, Accrued Expenses).
5. **Equity** (3000s): Normal Credit balance. (Owner's Equity, Retained Earnings, Opening Balance Equity).
6. **Revenue** (4000s): Normal Credit balance. (Service Revenue, Hardware Sales, Software Subscriptions).
7. **Expenses** (5000s–6000s): Normal Debit balance. (Cost of Goods Sold, Sales Commissions, Rent, Utilities).
8. **Transaction Period Locking**: When an accounting period is closed and a company `lock_date` is established, the system strictly blocks any creation, edit, or deletion of financial records on or before that date across all modules.
9. **Modal-Only User Interface**: To ensure predictable, automated UI operation and eliminate disruptive OS-level alerts, browser-native dialogs (`confirm()` , `alert()` , `prompt()`) are disabled. All system prompts, confirmations, and forms render through custom HTML modals.

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2. User Roles & Permission Matrix (RBAC)

RunMyBusiness implements strict Role-Based Access Control (RBAC). Access to screens, buttons, sensitive financial figures, and write operations is determined by assigned system roles:

Role Name	Identifier	Intended Users	Primary Capabilities & Scope	Restrictions
System Administrator	`admin`	IT Admins, CTO, System Engineers	Full system-wide access; User provisioning; Role assignment; SMTP configuration; Audit log inspection; Company lock date controls; CSV migration tools.	Cannot bypass balanced journal entry rules.
Business Owner	`owner`	Managing Partners, CEO, Executive Directors	High-level financial reporting (P&L, Balance Sheet); Reviewing and executing formal approval on commission payout batches; Authorizing quote discounts; Setting strategic customer named account rules.	Typically does not enter daily vendor receipts.
Sales Manager	`sales_manager`	VP of Sales, Sales Directors	Executive sales pipeline overview; Representative conversion performance breakdown; Authorizing quote discounts; Reassigning account ownership; Managing company-wide sales exceptions.	Cannot view general ledger journals, bank feeds, or vendor payables.
Accountant / Controller	`accountant`	Staff Bookkeepers, CPAs, Financial Controllers	Day-to-day transaction processing: Invoicing customers, recording customer cash receipts, entering vendor bills, bank statement CSV reconciliation, posting GL journals, ADP payroll clearing.	Cannot alter system users, security policies, or SMTP credentials.
Operations Director	`operations`	Operations Managers, Field Dispatch Leads	Commercial-to-operations handoff package review; Mandatory safety, access, and scope checklist auditing; Handoff acceptance or return with corrective feedback; Active service terms inspection.	Cannot alter quote pricing, financial accounts, or commission rules.
Sales Representative	`salesperson`	Account Executives, Outside Sales (e.g. Carlos, Omar)	Dedicated personal sales work queue; Personal commissions dashboard; Managing assigned accounts, contacts, leads, activities, quotes, and handoffs; Mathematical "Explain" breakdown modals.	Strict data isolation: Cannot view other reps' earnings, manager queues, company financial statements, banking screens, or GL journals.

3. System Navigation & Interface Overview

The RunMyBusiness web interface is organized into a persistent navigation layout with a left sidebar, a top contextual header, and a dynamic main content workspace.

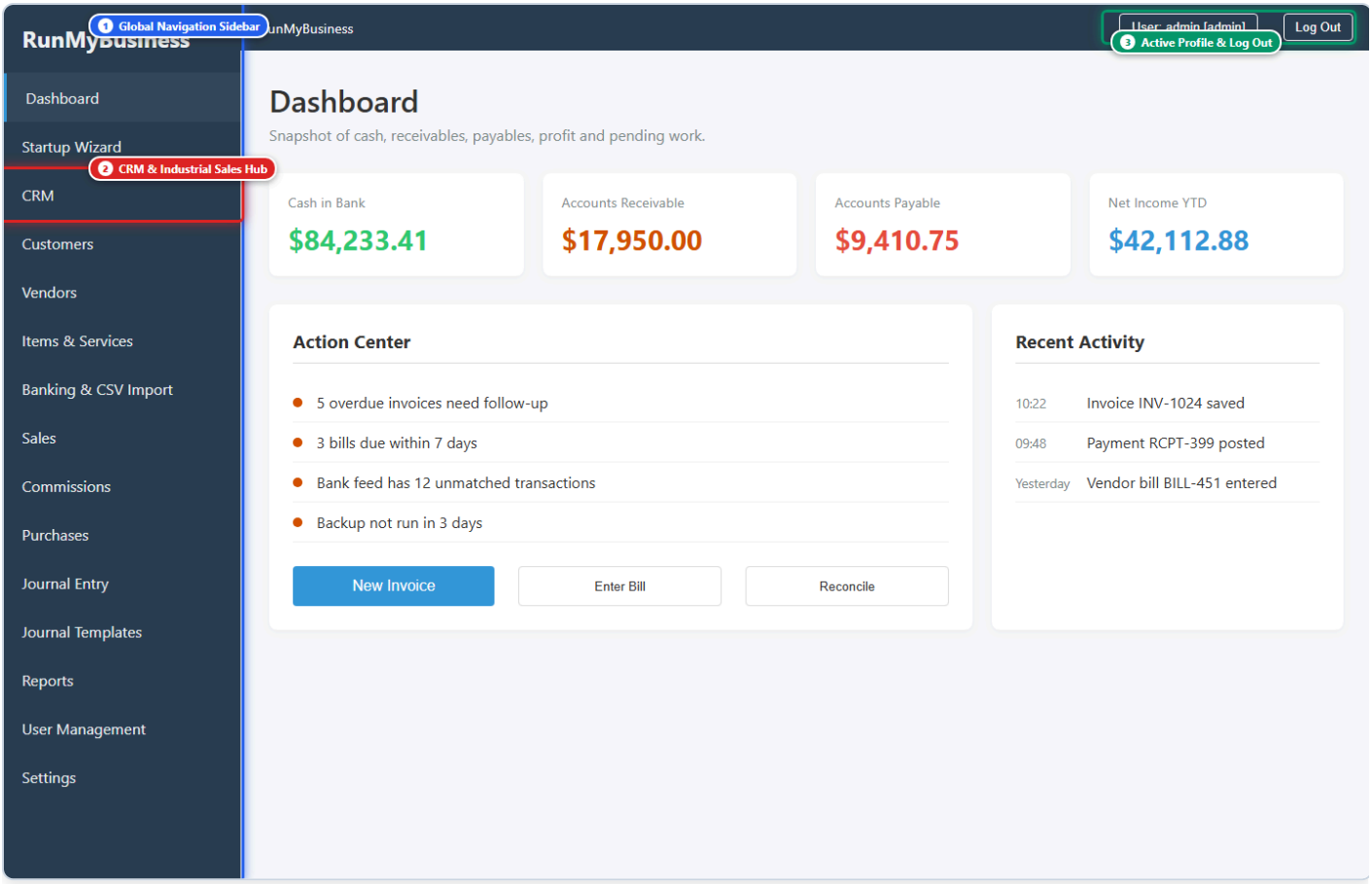


Figure 1: RunMyBusiness main dashboard layout, global sidebar navigation, and financial action center.

Visual Callout Reference — Figure 1

Callout	Element & Target	Control Type	Operational Function & System Behavior
`[1]`	**Global Navigation Sidebar** (`.sidebar`)	Primary Menu	Persistent left sidebar granting instantaneous single-click navigation across all financial, sales, and operational modules without full-page reloads.
`[2]`	**CRM & Industrial Sales Hub** (`#nav-item-crm`)	Module Tab	Opens the 11-subtab enterprise relationship suite covering multi-site hierarchies, CPQ quoting, PO matching, and work queues.
`[3]`	**Top Header & Active Profile** (`.header-right`)	User Utilities	Displays the logged-in username and role badge. Clicking opens the **My Profile & Security** modal to change passwords, update emergency contact emails, or log out safely.
`[4]`	**Real-Time Financial KPIs** (`.kpi-grid`)	Metric Cards	Live General Ledger aggregation displaying aggregate Cash in Bank, Accounts Receivable, Accounts Payable, and Net Income YTD.

4. Executive Dashboard & Financial Action Center

The **Dashboard** (`#dashboard`) delivers an instant financial snapshot of operating health and pinpoints high-priority items requiring immediate team attention.

4.1 Real-Time Financial Metric Cards

- **Cash in Bank**: Aggregate real-time balance of all active Asset bank and cash accounts (`Subtype: Cash`).
- **Accounts Receivable**: Total outstanding unpaid balance across all open customer invoices.
- **Accounts Payable**: Total outstanding balance across all unpaid vendor bills.
- **Net Income YTD**: Current fiscal year net profitability (`Total Revenue - Total Cost of Goods Sold - Total Operating Expenses`).

4.2 Action Center (`.action-center`)

The Action Center continuously scans database records to highlight operational bottlenecks: * **Overdue Invoices**: Flags invoices past their payment terms requiring collections outreach. * **Upcoming Bills Due**: Identifies vendor liabilities maturing within the next 7 business days to manage cash liquidity. * **Unmatched Bank Transactions**: Informs the bookkeeping team of imported statement lines awaiting reconciliation. * **Pending Commission Approvals**: Notifies management of submitted payout batches awaiting executive review.

4.3 Practical Workflow Example: Daily Executive Health Check

- **Scenario**: Executive Partner performs morning routine to verify company cash liquidity and evaluate aging AR before the daily management standup.
- **Step-by-Step Procedure**:
- Log into RMB at `http://100.106.122.22:8000` with executive credentials.
- Inspect **Figure 1, Callout 4**: Verify that Cash in Bank exceeds minimum operational liquidity threshold ($84,233.41).
- Under Action Center, observe notice: "*5 overdue invoices need follow-up ($17,950.00 total AR)*".
- Click the **New Invoice** quick-action button if a new emergency diagnostic billing needs immediate drafting, or click **Reconcile** to review 12 unmatched bank feed transactions.

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5. Chart of Accounts, General Ledger & Opening Balances

The **Chart of Accounts (COA)** is the financial foundation of RunMyBusiness. It organizes all economic activities into standard numbered account sequences.

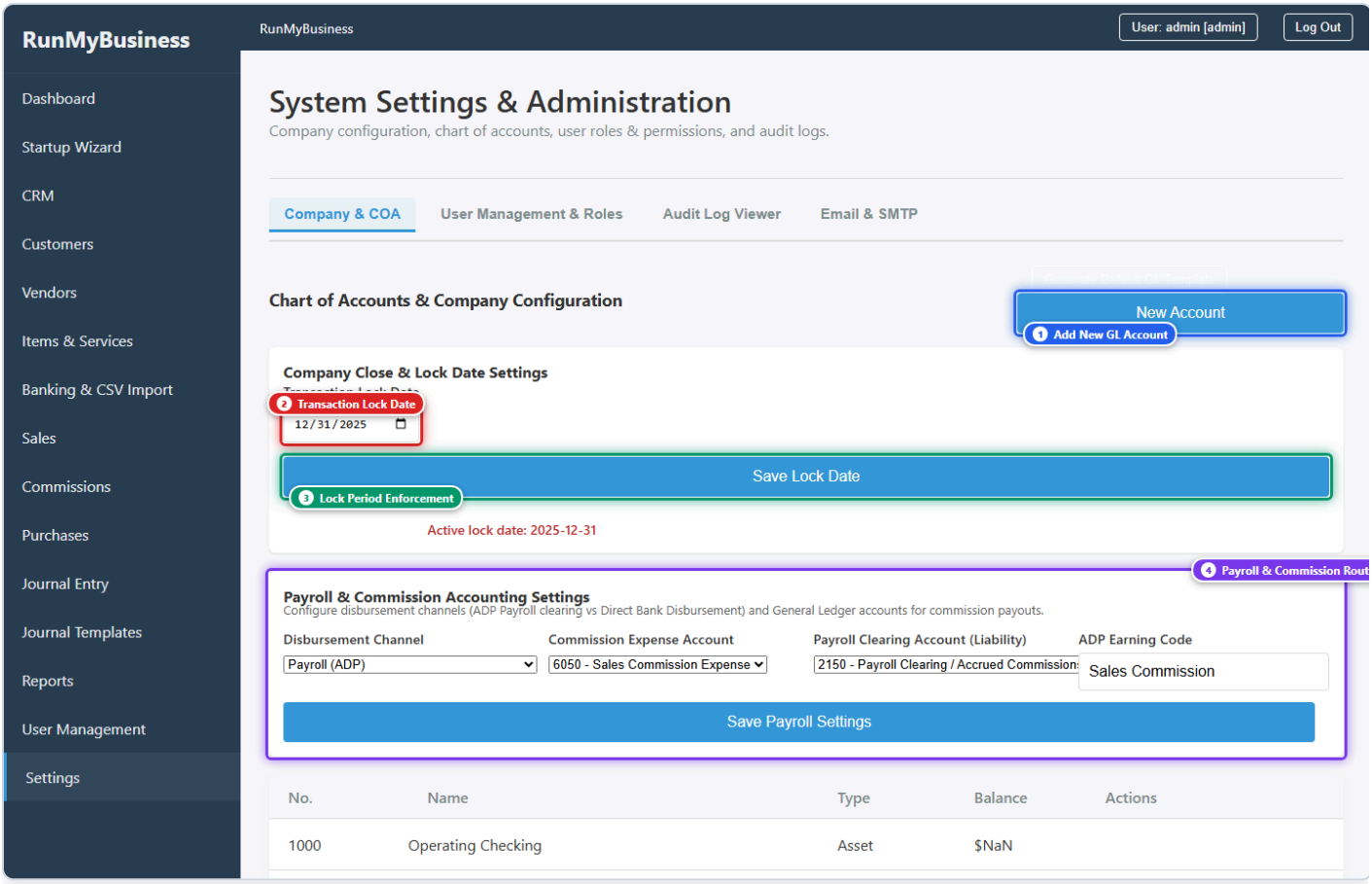


Figure 2: Chart of Accounts administration, Company Lock Date enforcement, and Commission GL routing.

Visual Callout Reference — Figure 2

Callout	Element & Target	Control Type	Operational Function & System Behavior
`[1]`	**Add New GL Account** (`#settings-new-account-btn`)	Modal Button	Launches modal to create a new General Ledger account with code, classification, parent account, and initial opening balance.
`[2]`	**Transaction Lock Date** (`#company-lock-date`)	Date Picker	Designates the immutable fiscal close boundary. Transactions dated on or before this calendar day cannot be posted, altered, or deleted.
`[3]`	**Lock Period Enforcement** (`#save-lock-date-btn`)	Action Button	Persists company lock date to system settings. Triggers real-time validation across Sales, Purchases, Banking, and Journal Entries.
`[4]`	**Payroll & Commission Routing** (`#card-payroll-commission-settings`)	Settings Panel	Configures whether salesperson commissions clear through ADP Payroll (`#2150`) or direct bank disbursement (`#1000`).

5.1 Account Numbering Standard

- `1000–1999` : **Assets** (e.g., `#1000 Operating Checking` , `#1050 Savings` , `#1200 Accounts Receivable`).

- `2000–2999`: **Liabilities** (e.g., `#2000 Accounts Payable`, `#2150 Payroll Clearing / Accrued Commissions`, `#2200 Sales Tax Payable`).
- `3000–3999`: **Equity** (e.g., `#3000 Common Stock`, `#3100 Retained Earnings`, `#3900 Opening Balance Equity`).
- `4000–4999`: **Operating Revenue** (e.g., `#4000 Service Revenue`, `#4100 Hardware Sales`, `#4200 Software Subscriptions`).
- `5000–5999`: **Cost of Goods Sold (COGS)** (e.g., `#5000 Direct Labor`, `#5100 Hardware Components`).
- `6000–6999`: **Operating Expenses** (e.g., `#6050 Sales Commission Expense`, `#6100 Rent Expense`, `#6200 Utilities`).

5.2 Opening Balances & Equity Offsets

When migrating an existing business into RunMyBusiness: 1. Opening balances can be entered **only during initial account creation** (disabled during subsequent account edits to maintain audit integrity). 2. When an opening balance is saved, the system automatically posts a balanced General Ledger journal entry offsetting the opening balance against `Account #3900 Opening Balance Equity`: * *Creating Asset Account `#1000 Checking` with $50,000 opening balance*: * **Debit**: `#1000 Operating Checking` $50,000.00 * **Credit**: `#3900 Opening Balance Equity` $50,000.00 * *Creating Liability Account `#2000 Accounts Payable` with $12,000 opening balance*: * **Debit**: `#3900 Opening Balance Equity` $12,000.00 * **Credit**: `#2000 Accounts Payable` $12,000.00 3. Duplicate Opening Balance Equity accounts are strictly blocked by the system schema.

5.3 Practical Workflow Example: Year-End Fiscal Close & Lock Date Enforcement

- **Scenario**: Head Controller closes out Fiscal Year 2025 on January 15, 2026 and sets the transaction lock date to `2025-12-31`.
- **Step-by-Step Procedure**:
- Navigate to **Settings** (`#settings`) -> **Company & COA** (`#tab-settings-coa`).
- Locate **Figure 2, Callout 2** (`#company-lock-date`).
- Enter `2025-12-31` and click **Save Lock Date** (`#save-lock-date-btn`, Callout 3).
- The system updates status: "*Lock date set to 2025-12-31*".
- **Verification**: If a user attempts to backdate a customer invoice or manual journal to `2025-12-15`, the system blocks the submission with an immediate error modal: "*Transaction falls within locked period (Lock Date: 2025-12-31)*".

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6. Customers, Invoicing & Accounts Receivable (AR)

The **Sales** workspace (`#sales`) and **Customers** workspace (`#customers`) manage all revenue generation, customer balances, and cash collection.

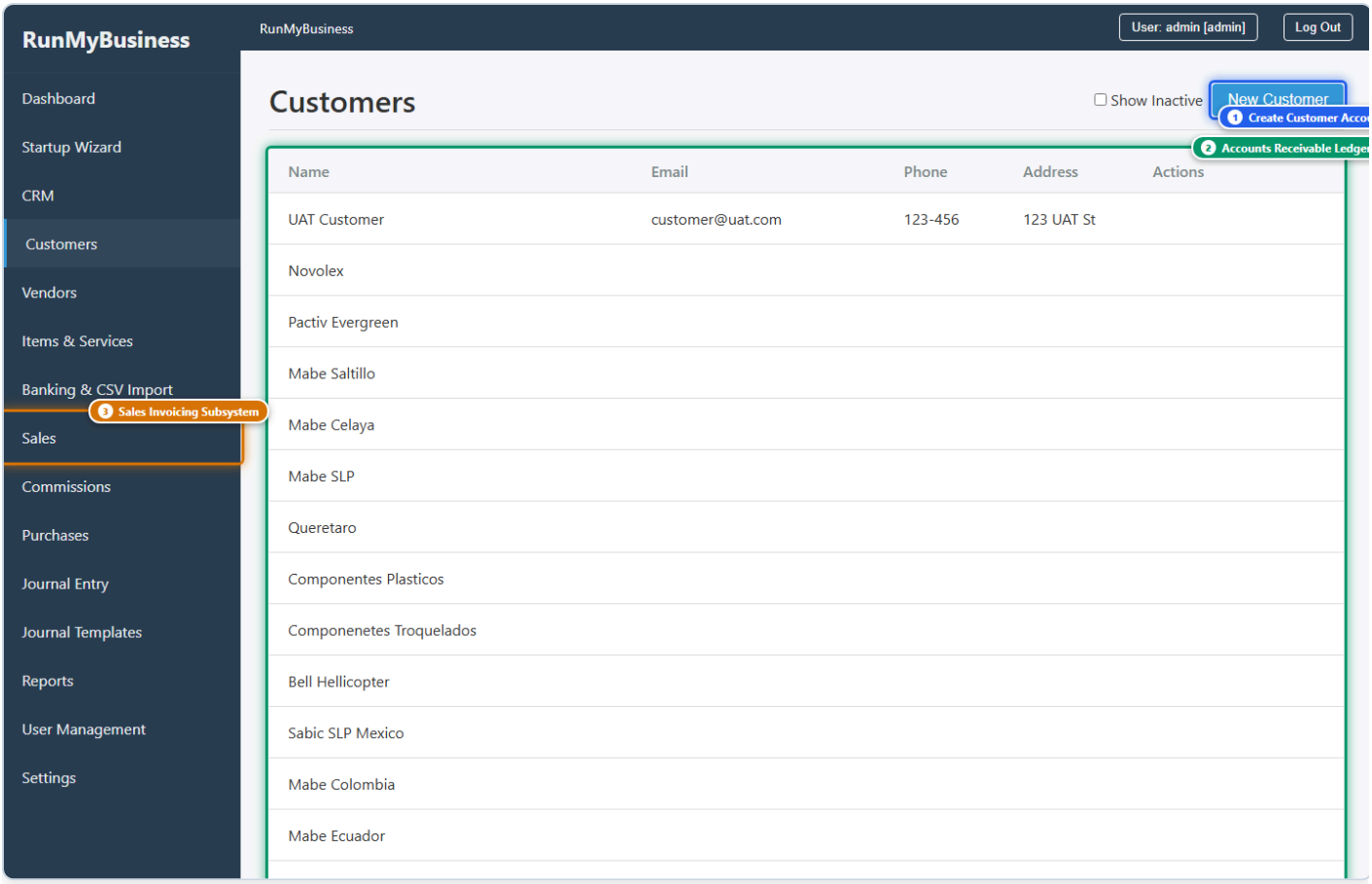


Figure 3: Customer directory, active accounts receivable balances, and invoice creation links.

Visual Callout Reference — Figure 3

Callout	Element & Target	Control Type	Operational Function & System Behavior
`[1]`	**Create Customer Account** (`button:has-text("New Customer")`)	Modal Button	Opens the customer registration modal to record enterprise clients, payment terms (Net 30/60), and billing addresses.
`[2]`	**Accounts Receivable Ledger** (`#customers .data-table`)	Data Table	Filterable master customer directory displaying contact details, active status, credit terms, and total outstanding receivables.
`[3]`	**Sales Invoicing Subsystem** (`.sidebar a[data-target="sales"]`)	Navigation Link	Direct link to the Sales Invoices ledger to create invoices, record customer payments, and view credit memos.

6.1 Creating a Sales Invoice

1. In the sidebar, click **Sales** (`data-target="sales"`).
2. Click **New Invoice** (`#sales-new-invoice-btn`).
3. In the modal form:
4. **Customer**: Select customer (e.g., `Novolex - Kalamazoo Plant`).
5. **Invoice Date**: Must be after the company lock date.

6. **Due Date**: Automatically computed from payment terms (e.g., Net 30).
7. **Customer PO Number**: Cross-referenced customer purchase order (e.g., `PO-NOV-2026-99`).
8. **Line Items**: Add one or more products/services:
    - *Item*: Select catalog item (auto-populates description, unit price, and sales GL account).
    - *Commission Category*: `Service`, `Hardware`, or `Noncommissionable`.
    - *Sale Type*: `New` or `Renewal`.
    - *Quantity & Unit Price*: Stored to the exact cent.
    - *Taxable Toggle*: Applies company sales tax rate when checked.
9. Click **Save Invoice**.

Automated GL Journal Generation

Posting an invoice automatically creates a balanced General Ledger journal: * **Debit**: `Account #1200 Accounts Receivable` (Invoice Total) * **Credit**: `Account #4000/4100 Revenue Account` (Invoice Subtotal) * **Credit**: `Account #2200 Sales Tax Payable` (Calculated Sales Tax, if applicable)

6.2 Recording Customer Payments

1. On the Sales screen, locate the open invoice.
2. Click **Record Payment** (`.record-payment-btn`).
3. In the payment modal:
4. **Payment Date**: Date funds were received in bank.
5. **Payment Method**: Check, ACH / Direct Deposit, Credit Card, or Wire.
6. **Reference / Check Number**: Bank trace or check number.
7. **Deposit Account**: Default `Account #1000 Operating Checking`.
8. **Payment Amount**: Full or partial payment.
9. Click **Save Payment**.

Automated GL Entry:

- **Debit**: `Account #1000 Operating Checking` (Cash Collected)
- **Credit**: `Account #1200 Accounts Receivable` (Reduction of Open Balance)

> 📌 **Important**
>
> **Commission Eligibility Rule**: Under RMB accounting rules, partial payments do **not** release partial commissions. A sales invoice commission record transitions from **Pending** to **Eligible** only when the invoice balance reaches **$0.00**.

6.3 Practical Workflow Example: Invoicing Novolex & Collecting Net 30 ACH

- **Scenario**: Accountant invoices Novolex for monthly predictive maintenance ($8,500.00) plus 5 replacement vibration sensors ($1,250.00) subject to 6.0% state sales tax ($75.00 tax on hardware).
- **Step-by-Step Procedure**:

- Click **Sales** (`data-target="sales"`) -> **New Invoice** (`#sales-new-invoice-btn`).
- Select Customer `Novolex` , Invoice Date `2026-09-01` , Due Date `2026-10-01` (Net 30), PO `PO-NOV-2026-01` .
- Add Line 1: `Monthly PdM Service` , Category: `Service` , Qty: `1` , Rate: `$8,500.00` , Taxable: `False` .
- Add Line 2: `Vibration Sensor VIB-100` , Category: `Hardware` , Qty: `5` , Rate: `$250.00` ($1,250.00), Taxable: `True` .
- Verify Totals: Subtotal `$9,750.00` + Sales Tax `$75.00` = Total `$9,825.00` .
- Click **Save Invoice**. The system generates GL Journal `#JRN-1044` with balanced Debits and Credits.
- On September 28, 2026, when ACH payment arrives, click **Record Payment**, select ACH, amount `$9,825.00` , trace `ACH-99412` . The invoice balance becomes `$0.00` , and the linked commission record for sales rep Omar transitions from **Pending** to **Eligible**!

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7. Vendors, Purchase Bills & Accounts Payable (AP)

The **Purchases** workspace (`#purchases`) and **Vendors** workspace (`#vendors`) control vendor liabilities, expense classification, and cash disbursements.

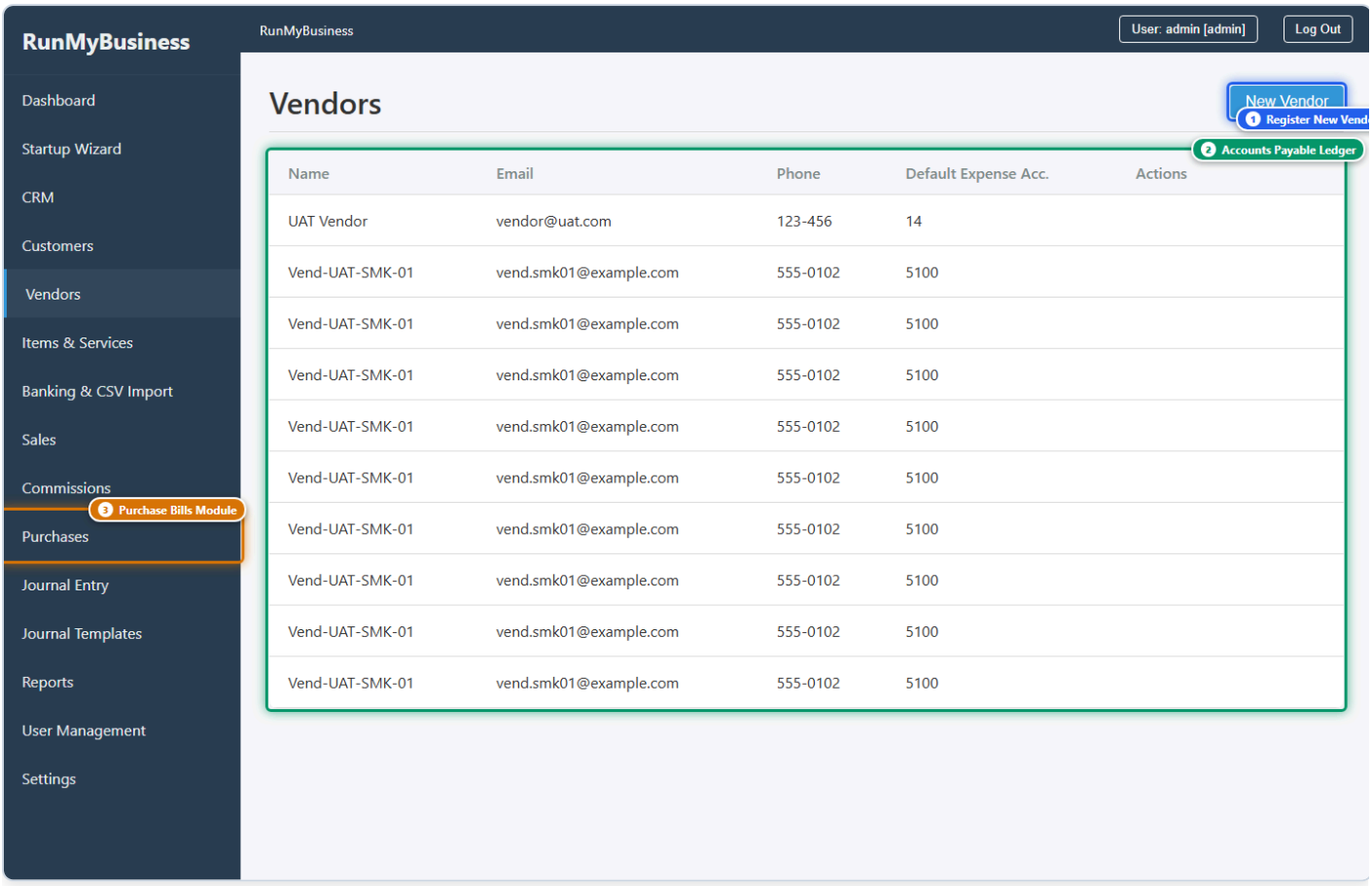


Figure 4: Vendor directory, outstanding AP balances, and purchase bill ingestion controls.

Visual Callout Reference — Figure 4

Callout	Element & Target	Control Type	Operational Function & System Behavior
`[1]`	**Register New Vendor** (`button:has-text("New Vendor")`)	Modal Button	Opens the vendor registration dialog to record component manufacturers, calibration laboratories, and subcontractors.
`[2]`	**Accounts Payable Ledger** (`#vendors .data-table`)	Data Table	Filterable vendor master list tracking contact emails, telephone numbers, default expense GL accounts, and open balances.
`[3]`	**Purchase Bills Module** (`.sidebar a[data-target="purchases"]`)	Navigation Link	Direct link to the Accounts Payable bill ledger to record supplier invoices, schedule disbursements, and track payment aging.

7.1 Recording a Vendor Purchase Bill

1. In the sidebar, click **Purchases** (`data-target="purchases"`).
2. Click **New Bill** (`#purchases-new-bill-btn`).
3. Enter bill details:
4. **Vendor**: Select from vendor directory (e.g. `PCB Piezotronics`).
5. **Bill Number**: Vendor's reference invoice number (e.g., `INV-PCB-8831`).
6. **Bill Date & Due Date**: For AP aging schedules.
7. **Line Items**: Select expense account (`#5100 Hardware Cost` , `#6100 Rent` , `#6200 Utilities`), item description, and amount.
8. Click **Save Bill**.

Automated GL Entry:

- **Debit**: Designated Expense / Asset Account (e.g., `#5100 Hardware Cost` or `#1300 Inventory`)
- **Credit**: `Account #2000 Accounts Payable` (Vendor Liability)

7.2 Disbursing Bill Payments

1. On the Purchases list, locate the open bill.
2. Click **Pay Bill** (`.pay-bill-btn`).
3. Select payment date, disbursement bank account (`#1000 Operating Checking`), payment method (Check/ACH), and check reference.
4. Click **Save Payment**.

Automated GL Entry:

- **Debit**: `Account #2000 Accounts Payable` (Liability Extinguished)
- **Credit**: `Account #1000 Operating Checking` (Cash Withdrawn)

7.3 Practical Workflow Example: Ingesting Sensor Hardware Bill & Disbursing ACH

- **Scenario**: Operations orders 20 triaxial accelerometers from PCB Piezotronics for $3,600.00 on Net 30 terms.
- **Step-by-Step Procedure**:
- Click **Purchases** -> **New Bill** (`#purchases-new-bill-btn`).
- Select Vendor `PCB Piezotronics` , Bill Number `PCB-2026-441` , Bill Date `2026-09-05` , Due Date `2026-10-05` .
- Add Line: Expense Account `#5100 Hardware Cost / COGS` , Memo: `20x Triax Accelerometers` , Amount: `$3,600.00` .
- Click **Save Bill**. The system posts Debit `#5100` $3,600.00 and Credit `#2000 Accounts Payable` $3,600.00.
- On October 4, 2026, click **Pay Bill**, select payment method `ACH` , bank account `#1000 Operating Checking` , trace `ACH-PCB-104` .
- The system extinguishes the liability: Debit `#2000 AP` $3,600.00, Credit `#1000 Operating Checking` $3,600.00.

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8. Items & Services Catalog

The **Items & Services** catalog (`#items`) defines standard products, services, sensors, hardware units, and hourly rates offered to clients.

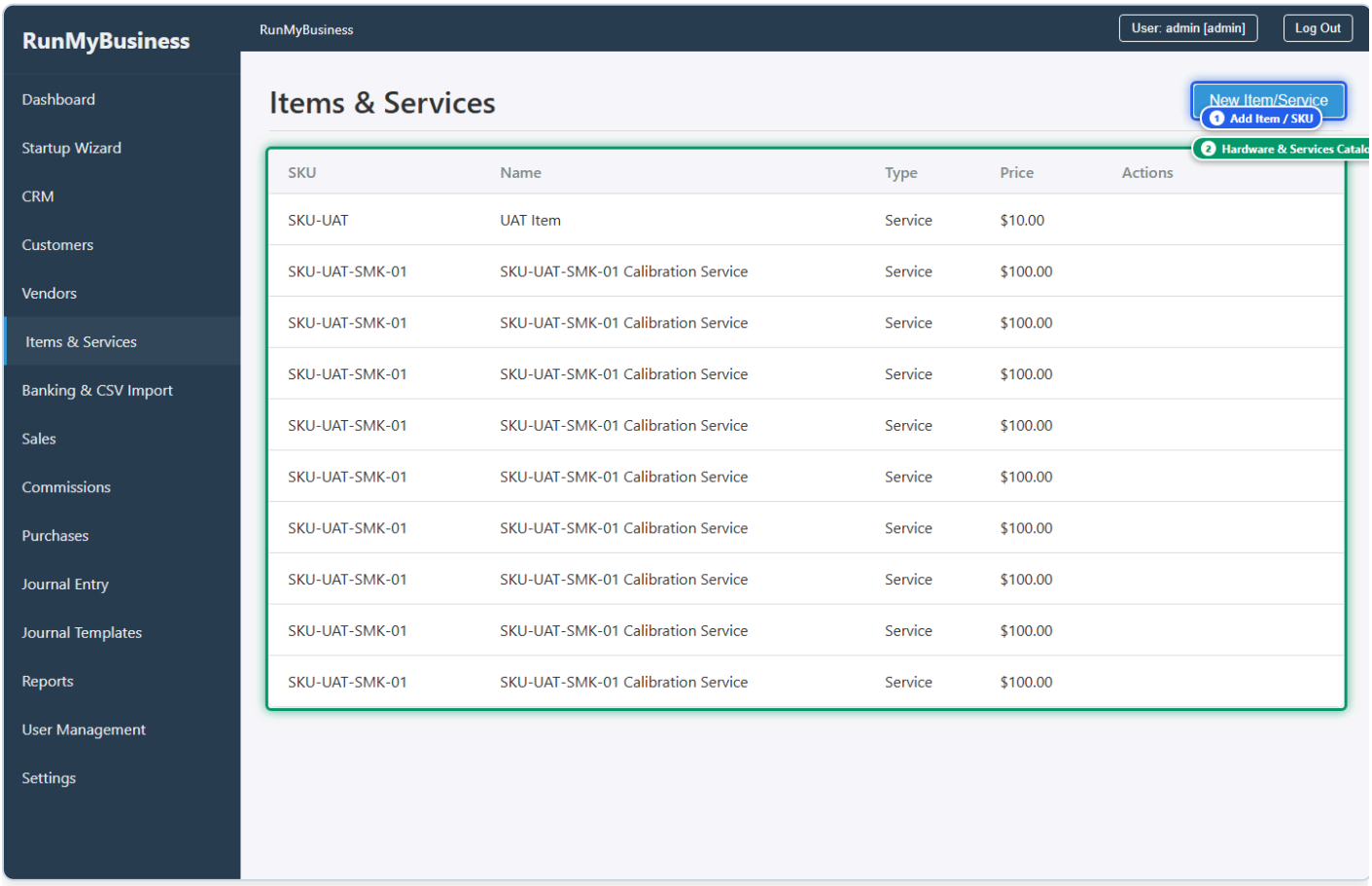


Figure 5: Product catalog, SKU numbering, standard pricing, and commission categorization.

Visual Callout Reference — Figure 5

Callout	Element & Target	Control Type	Operational Function & System Behavior
`[1]`	**Add Item / SKU** (`button:has-text("New Item")`)	Modal Button	Opens the item creation modal to define new service offerings, hardware SKUs, pricing, and default accounting accounts.
`[2]`	**Hardware & Services Catalog** (`#items .data-table`)	Data Table	Catalog listing displaying SKU, item description, category, unit sale price, unit cost, and commission class.

8.1 Catalog Configuration Attributes

- **Item Name & SKU**: Unique product codes (e.g., `SENS-VIBE-01`).
- **Type**: `Service` or `Product` .
- **Default Income Account**: Revenue account automatically mapped during invoice line entry (e.g., `#4100 Hardware Revenue`).
- **Default Expense Account**: COGS or expense account mapped when creating purchase bills (e.g., `#5100 Hardware Cost`).
- **Commission Category**: Sets default commission classification:
- `Hardware` : Qualifies for hardware commission rates (e.g. 7.5% or 3.75%).
- `Service` : Qualifies for service rates (e.g. 5.0% or 2.5%).
- `Noncommissionable` : Strictly 0.0% commission (freight, pass-through licensing, disposal fees).
- **Taxable**: Flags whether sales tax is calculated on this line item.

8.2 Practical Workflow Example: Creating a High-Frequency Vibration Sensor SKU

- **Scenario**: Administrator configures a new wireless IoT vibration sensor SKU in the catalog.
- **Step-by-Step Procedure**:
- In the sidebar, click **Items & Services** (`data-target="items"`).
- Click **New Item** (Figure 5, Callout 1).
- Enter Name: `Wireless IoT Vibration Sensor` , SKU: `VIB-IOT-200` , Type: `Product` .
- Unit Sale Price: `$450.00` , Unit Cost: `$210.00` .
- Default Income Account: `#4100 Hardware Sales Revenue` ; Default Expense Account: `#5100 Hardware Cost / COGS` .
- Commission Category: Select `Hardware` (ensures reps receive hardware commission rates upon customer payment).
- Taxable: Check box (hardware components are subject to state sales tax).
- Click **Save Item**. The SKU is immediately available for CPQ quoting and invoice generation.

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9. Banking, CSV Statement Import & Bank Feed Reconciliation

The **Banking** workspace (`#banking`) allows bookkeepers to import electronic bank statements and perform real-time cash reconciliation against the General Ledger.

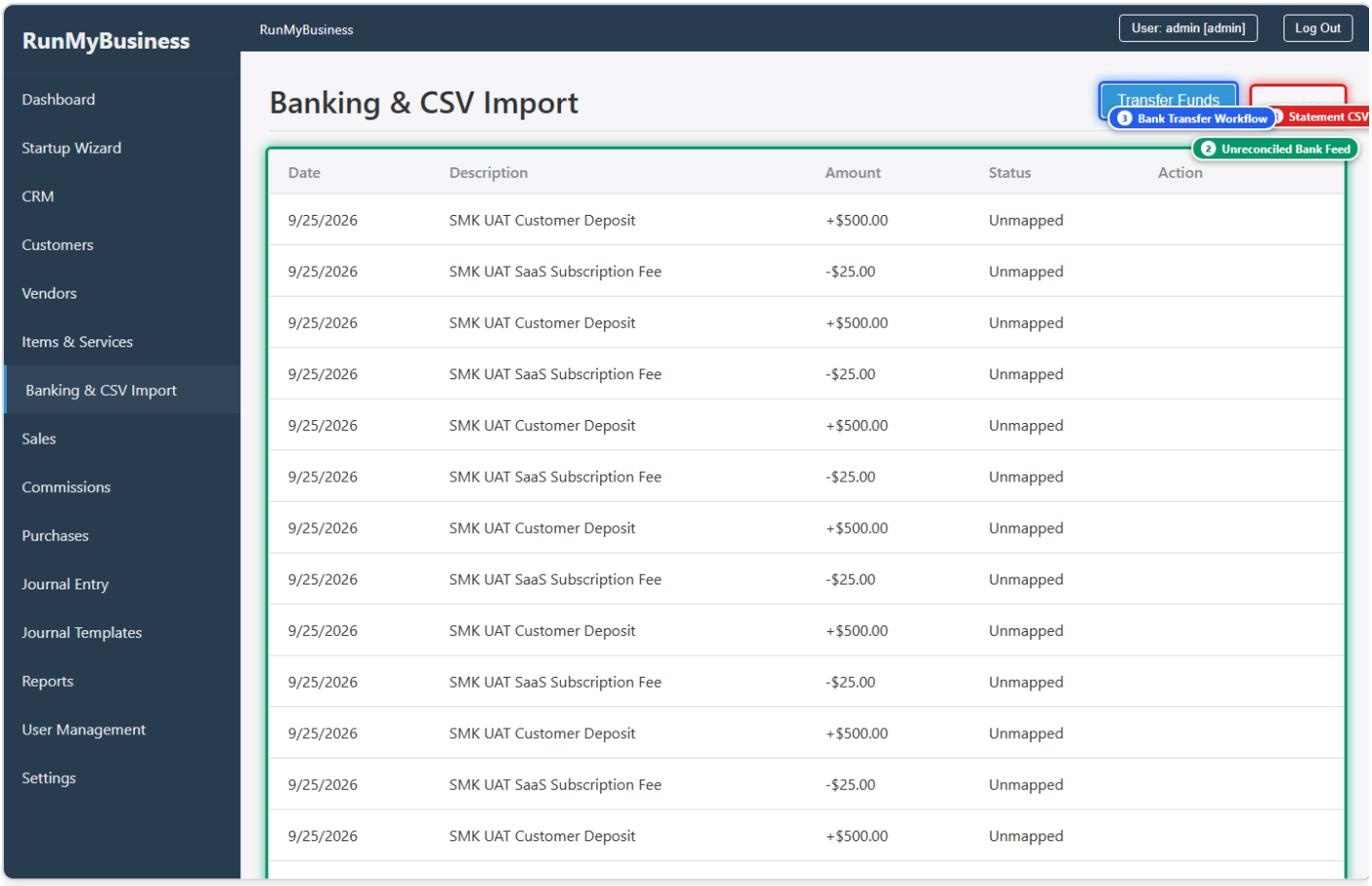


Figure 6: Bank account statement CSV ingestion, unmatched feed transactions, and fund transfer controls.

Visual Callout Reference — Figure 6

Callout	Element & Target	Control Type	Operational Function & System Behavior
`[1]`	**Statement CSV Import Dropzone** (`button:has-text("Import CSV")`)	File Upload	Launches file selector to upload official bank CSV statement exports (Chase, Wells Fargo, Bank of America).
`[2]`	**Unreconciled Bank Feed** (`#banking .data-table`)	Data Table	Displays parsed bank transactions side-by-side with match suggestions and one-click reconciliation actions.
`[3]`	**Bank Transfer Workflow** (`button:has-text("Transfer Funds")`)	Modal Button	Executes balanced cash transfers between internal company bank accounts (e.g., Operating Checking to Payroll Checking).

9.1 Bank Statement CSV Import

1. In the sidebar, click **Banking & CSV Import** (`data-target="banking"`).

2. Select the target RMB bank account (e.g., `Account #1000 Operating Checking`).
3. Click **Import CSV** (Figure 6, Callout 1) and select your bank's CSV statement download.
4. The system parses:
5. **Transaction Date**
6. **Description / Payee**
7. **Amount** (Deposits / Withdrawals)
8. **Check / Reference Number**

9.2 Transaction Matching & Rule Categorization

The banking reconciliation grid displays imported transactions side-by-side with general ledger records: 1. **Automated Match**: If an imported deposit matches the date and exact dollar amount of an Accounts Receivable customer payment, RMB automatically flags it as **Matched**. Clicking **Confirm Match** reconciles the bank record. 2. **Rule Categorization**: For recurring bank debits (e.g., monthly software SaaS charges, bank service charges), bookkeepers map the payee directly to an expense account (`#6400 Bank Service Fees`). 3. **Clearing Account Settlement (ADP Payroll Clearing)**: * When ADP debits operating cash in a lump sum (covering wages and salesperson commissions), the bookkeeper categorizes the commission portion of the debit to `Account #2150 Payroll Clearing / Accrued Commissions`. * This generates: * **Debit**: `Account #2150` (clearing the accrued liability back to **$0.00**). * **Credit**: `Account #1000 Operating Checking` (recording actual cash outflow). * Result: **Zero duplicate expense and 100% balanced bank reconciliation.**

9.3 Practical Workflow Example: Reconciling Monthly Bank Feed & ADP Clearing

- **Scenario**: Bookkeeper downloads Chase statement CSV and reconciles a $9,825.00 customer deposit and a $4,311.50 ADP payroll debit.
- **Step-by-Step Procedure**:
- Click **Banking & CSV Import** -> **Import CSV** (Figure 6, Callout 1).
- Select file `Chase_Sept2026_Statement.csv`. The table populates 12 unmatched records.
- Row 1: Deposit `$9,825.00` from `Novolex ACH`. The system detects matching receipt `RCPT-399` on Invoice `INV-1024`. Click **Confirm Match**. Status updates to green `Reconciled`.
- Row 2: Withdrawal `$4,311.50` from `ADP PAYROLL FEES/WAGES`. Click **Categorize**, select Account `#2150 Payroll Clearing / Accrued Commissions`, memo: `Sept Sales Commission Clearing`.
- Click **Post & Reconcile**. The liability account `#2150` is debited $4,311.50, perfectly zeroing out the accrued commission liability without double-counting commission expense!

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10. Manual Journal Entries & Recurring Templates

For accountants needing to make adjusting entries, tax accruals, depreciation entries, or recurring adjustments:

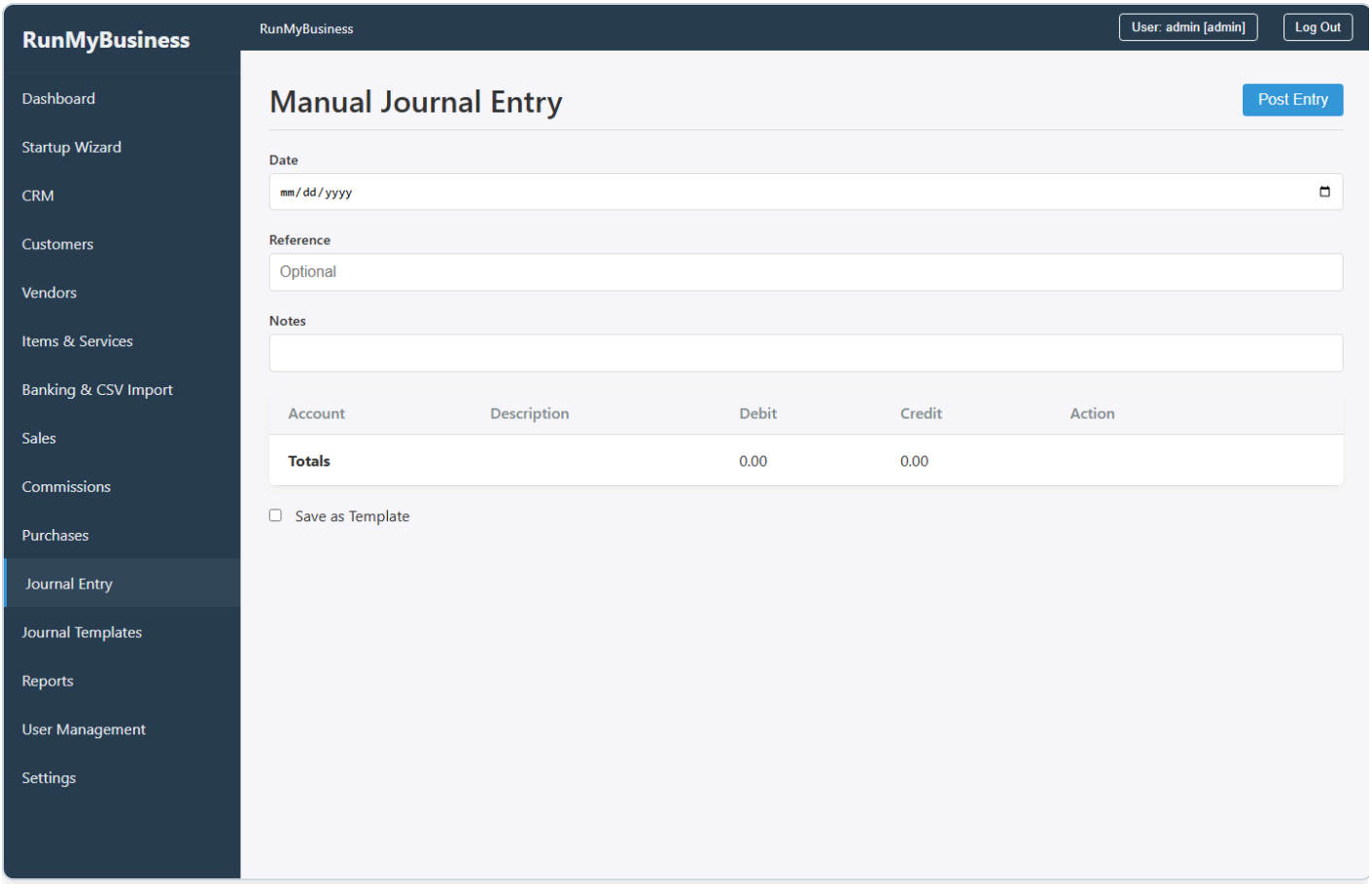


Figure 7: Multi-line journal entry grid, double-entry validation indicator, and transaction lock date check.

Visual Callout Reference — Figure 7

Callout	Element & Target	Control Type	Operational Function & System Behavior
`[1]`	**Transaction Date** (`#journal-date`)	Date Picker	Sets journal posting date. Strictly validated against company lock date to prevent backdating into closed fiscal periods.
`[2]`	**Debits & Credits Balancing Grid** (`#journal-lines-container`)	Multi-Row Form	Dynamic multi-line transaction entry allowing selection of GL accounts, line memos, debit amounts, and credit amounts.
`[3]`	**Double-Entry Validation Status** (`button[type="submit"]`)	Action Button	Real-time validator checking that `Total Debits == Total Credits` . Posting is disabled if any variance exists.

10.1 Creating a Manual Journal Entry

1. In the sidebar, click **Journal Entry** (`data-target="journal"`).
2. Enter **Date** (Figure 7, Callout 1) and **Memo** (e.g. "*Monthly Prepaid Rent Amortization*").
3. In the line grid (Figure 7, Callout 2):
4. Line 1: Select Account `#6100 Rent Expense` , enter Debit `$3,000.00` .
5. Line 2: Select Account `#1400 Prepaid Rent` , enter Credit `$3,000.00` .

6. Inspect the balance indicator: Total Debits `$3,000.00` = Total Credits `$3,000.00` (Variance: `$0.00`).
7. Click **Post Journal Entry** (Figure 7, Callout 3). The entry posts to the general ledger and updates all financial statements immediately.

10.2 Practical Workflow Example: Amortizing Commercial Liability Insurance

- **Scenario**: On October 1, 2026, accountant amortizes one month of commercial facility insurance ($1,200.00/month) from the Prepaid Insurance asset account.
- **Step-by-Step Procedure**:
- Click **Journal Entry** (`data-target="journal"`).
- Set Date: `2026-10-01` , Reference: `ADJ-2026-10-INS` , Description: `October 2026 General Liability Amortization` .
- Row 1: Account `#6300 Insurance Expense` , Description: `Monthly GL coverage` , Debit: `$1,200.00` , Credit: `$0.00` .
- Row 2: Account `#1410 Prepaid Insurance` , Description: `Offset prepaid policy` , Debit: `$0.00` , Credit: `$1,200.00` .
- Confirm live indicator: Total Debits `$1,200.00` == Total Credits `$1,200.00` (Difference: `$0.00`).
- Click **Post Journal Entry**. The general ledger reflects the amortization immediately with full double-entry integrity.

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11. Financial Reporting & Core Financial Statements

The **Reports** workspace (`#reports`) generates real-time, GAAP-compliant financial statements without requiring batch closing runs:

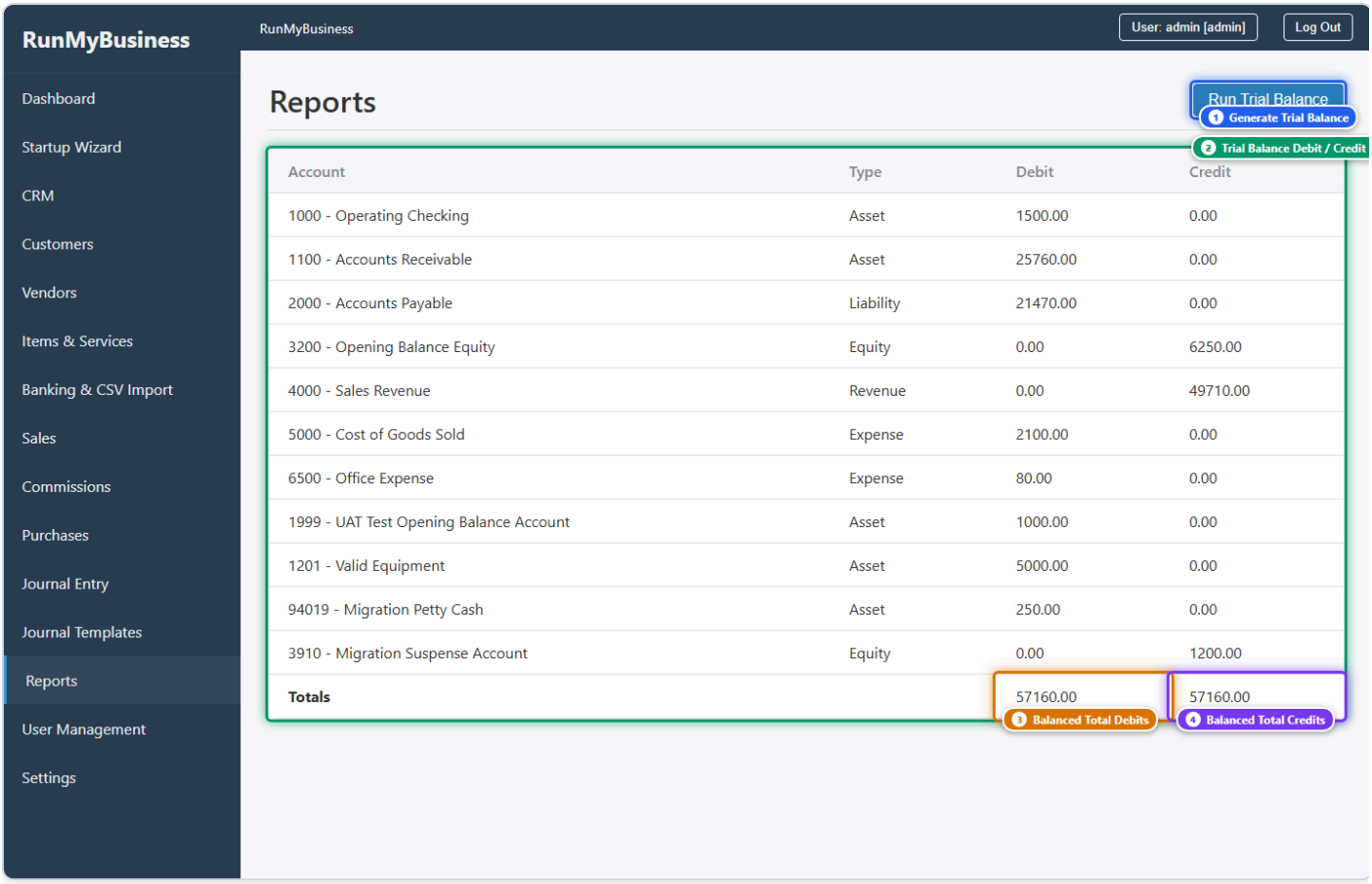


Figure 8: Real-time Trial Balance generation, balanced debits and credits totals, and financial reporting.

Visual Callout Reference — Figure 8

Callout	Element & Target	Control Type	Operational Function & System Behavior
`[1]`	**Generate Trial Balance** (`button:has-text("Run Trial Balance")`)	Action Button	Queries live general ledger balances across all 5 account classes and renders the balanced verification grid.
`[2]`	**Trial Balance Debit / Credit Grid** (`#report-results`)	Data Table	Itemized account listing displaying account number, title, class, current debit balance, and current credit balance.
`[3]`	**Balanced Total Debits** (`#report-total-debit`)	Summary Field	Aggregate sum of all active debit balances across all asset and expense accounts.
`[4]`	**Balanced Total Credits** (`#report-total-credit`)	Summary Field	Aggregate sum of all active credit balances across liability, equity, and revenue accounts (must exactly equal Total Debits).

11.1 Available Financial Statements

1. **Balance Sheet**: Displays company financial position as of a specified date:
2. `Assets = Liabilities + Equity`
3. Accurately reflects current year retained earnings.

4. **Profit & Loss (P&L) / Income Statement**: Summarizes commercial profitability over a selected date range:
5. Operating Revenue
6. Less: Cost of Goods Sold (COGS) = **Gross Profit**
7. Less: Operating Expenses (Commissions, Rent, Payroll, Overhead) = **Net Operating Income**
8. **Trial Balance**: Lists every account in the Chart of Accounts with its current debit or credit balance, proving total system debit/credit equality.
9. **General Ledger Detail**: Granular transaction ledger showing every debit, credit, date, reference, and running balance per account.
10. **AR & AP Aging Schedules**: Classifies outstanding customer invoices and vendor bills into aging buckets (`Current` , `1–30 Days` , `31–60 Days` , `61–90 Days` , `90+ Days`).

11.2 Practical Workflow Example: Auditing Trial Balance & Gross Margins

- **Scenario**: Accountant performs end-of-month financial audit to confirm debit/credit equality and inspect Gross Margins.
- **Step-by-Step Procedure**:
- Click **Reports** (`data-target="reports"`).
- Click **Run Trial Balance** (Figure 8, Callout 1).
- Inspect bottom footer (Figure 8, Callouts 3 & 4): Confirm that **Balanced Total Debits** ($112,410.75) equals **Balanced Total Credits** ($112,410.75) with zero imbalance.
- Select **Profit & Loss** statement: Review Service Revenue (`#4000`) of $84,000.00 against Direct Field Labor COGS (`#5000`) of $22,000.00, yielding a healthy 73.8% Gross Margin.
- Click **Print / Export PDF** to generate board-ready financial schedules.

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12. Commissions Management & ADP Payroll Integration

The **Commissions** module (`#commissions`) is an automated compensation engine that links sales purchase orders, invoice payment collections, executive approval workflows, and payroll clearing.

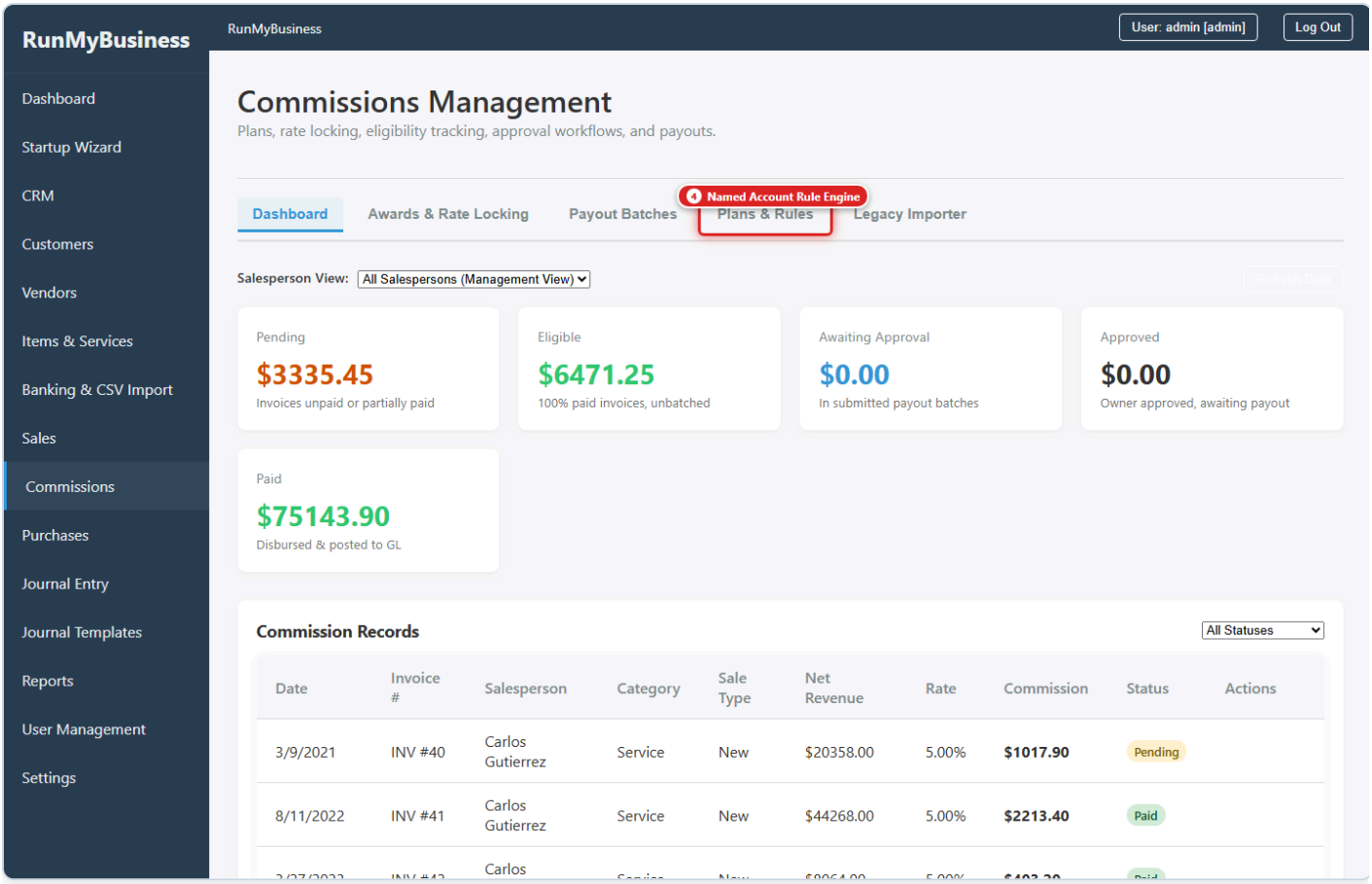


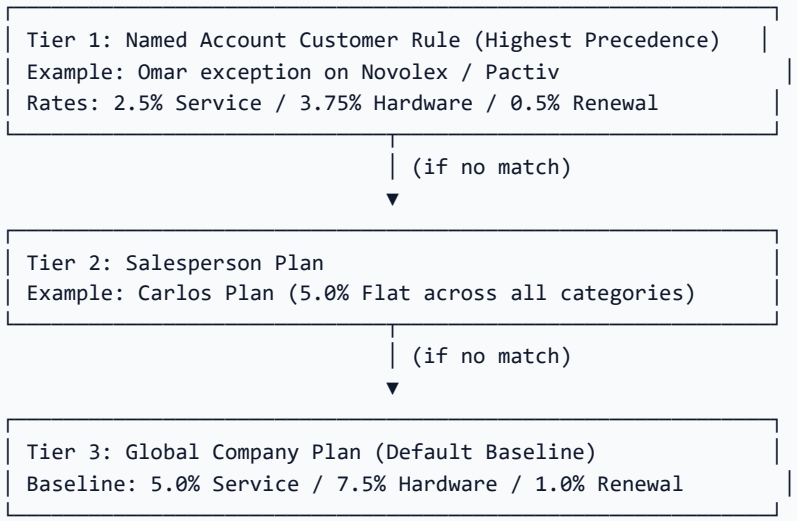
Figure 9: Salesperson commission dashboard, earnings progression metrics, and Named Account rule management.

Visual Callout Reference — Figure 9

Callout	Element & Target	Control Type	Operational Function & System Behavior
`[1]`	**Salesperson Filter** (`#comm-salesperson-filter`)	Dropdown	Filters dashboard metrics and records by sales representative (e.g. Carlos Gutierrez, Omar Escartin, or Management View).
`[2]`	**Pending Earnings Metric Card** (`#comm-kpi-pending`)	Metric Card	Displays commission dollars earned on issued invoices where customer payment is still pending or partially collected.
`[3]`	**Eligible Earnings Metric Card** (`#comm-kpi-eligible`)	Metric Card	Displays commission dollars on 100% paid invoices that are unlocked and ready to be assembled into a payout batch.
`[4]`	**Named Account Rule Engine** (`#tab-comm-plans`)	Subtab	Accesses company commission plans and Tier 1 customer-specific exception rules (e.g. Omar's Novolex/Pactiv exception rates).

12.1 The 3-Tier Rate Precedence Architecture

When an award is created upon receiving a customer Purchase Order, RMB resolves commission rates using a strict hierarchy:



12.2 Immutable Rate Locking at PO Receipt

At the moment a customer PO is received and logged in RMB, the applicable rates, customer, site, scope, and salesperson splits are **frozen**. Subsequent changes to company commission plans or rep compensation never alter previously locked historical awards.

12.3 4-Stage Payout Batch Workflow

Commissions flow through a four-stage state machine: 1. **Draft**: Eligible commission records for a rep and period are assembled into a batch (`BATCH-YYYY-MM-REP`). Records can be reviewed and edited. 2. **Submitted**: Batch is locked and submitted for executive sign-off. 3. **Approved**: Owner/Executive signs off with timestamp and user ID. Batch becomes completely immutable. 4. **Paid**: Accounting records disbursement: * Generates downloadable **ADP Payroll CSV** (`.batch-adp-export-btn`). * Posts dual-channel General Ledger journal entry: * *Payroll (ADP)*: **Debit** `#6050 Sales Commission Expense` / **Credit** `#2150 Payroll Clearing` . * *Direct Disbursement*: **Debit** `#6050 Sales Commission Expense` / **Credit** `#1000 Operating Cash` .

12.4 Practical Workflow Example: Quoting, Rate Locking & Payout for Omar at Novolex

- **Scenario**: Omar Escartin closes a $100,000.00 reliability contract with Novolex ($80k service + $20k sensors).
- **Step-by-Step Procedure**:
- Customer issues Purchase Order `PO-NOV-2026-01` .
- Navigate to **Commissions** -> **Awards & Rate Locking** (`#tab-comm-awards`). Click **New Award**.
- Select Rep `Omar Escartin` , Customer `Novolex` , PO `PO-NOV-2026-01` .
- The system executes Tier 1 Named Account precedence and locks Tier 1 rates: `2.5% Service` ($2,000.00) and `3.75% Hardware` ($750.00). Total locked commission: `$2,750.00` .
- Accounting issues Invoice `INV-2026-101` for $100,000.00. The commission status is **Pending** ($2,750.00).
- Novolex pays in full on Day 25. The commission transitions to **Eligible** ($2,750.00, Figure 9, Callout 3).
- On month-end, bookkeeper clicks **Payout Batches** -> **New Batch**, selects Omar, month `September 2026` . The system groups the $2,750.00 record into `BATCH-2026-09-OMAR` .

- Rep submits batch; Owner clicks **Approve**; Accounting clicks **Record Payment**. The system exports `ADP_Import_BATCH-2026-09-OMAR.csv` and posts the GL accrual to `#2150 Payroll Clearing`.

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13. Customer Relationship Management (CRM) & Industrial Reliability Sales Engine

13.1 CRM Architecture & Organizational Hierarchy (Corporate HQ vs Plant Sites)

The RunMyBusiness CRM Expansion directly links enterprise relationship management, multi-site industrial sales pipelines, and ongoing commercial service agreements with the core double-entry accounting ledger.

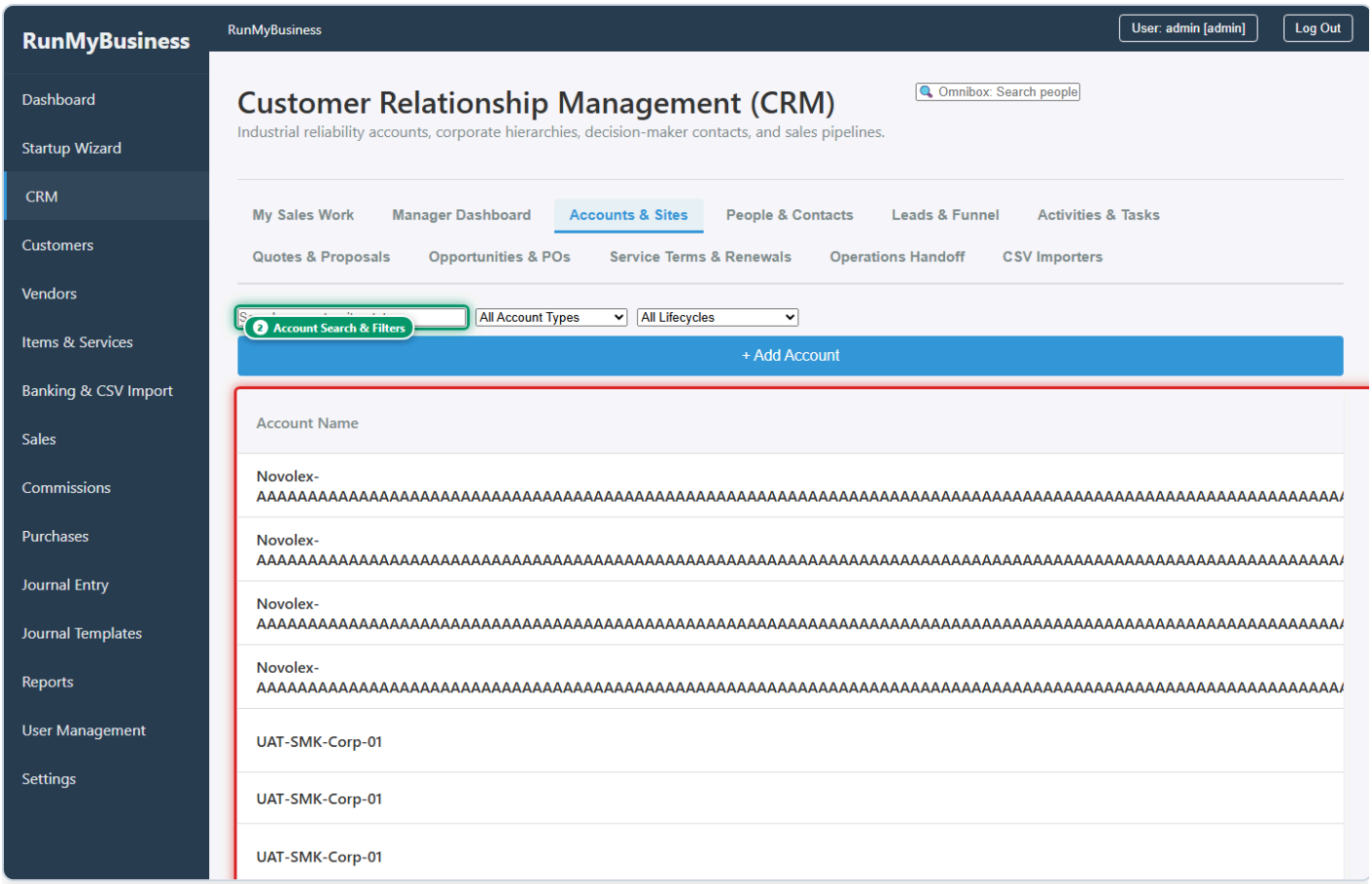


Figure 10: Enterprise corporate accounts, multi-site plant hierarchy, and strategic client badges.

Visual Callout Reference — Figure 10

Callout	Element & Target	Control Type	Operational Function & System Behavior
`[1]`	**Create Parent / Plant Site** (`#crm-new-account-btn`)	Modal Button	Launches account creation dialog with parent-child linkage, plant address, EPA facility ID, and operating unit counts.
`[2]`	**Account Search & Filters** (`#crm-account-search`)	Filter Input	Real-time text filter and account type dropdown (`Corporate HQ` , `Plant/Site` , `Distributor`).
`[3]`	**Corporate vs Plant Hierarchy** (`#crm-accounts-table`)	Tree Table	Displays organizational structure with parent corporate accounts and indented child manufacturing plant sites.

Corporate vs. Plant Hierarchy Model

- **Account Types**: `Corporate HQ` , `Plant/Site` , `Distributor` , `Other` .
- **Parent-Child Tree Structures**: Plants link to their parent corporate organization (`parent_id`), supporting multi-tier corporate hierarchies with circular relationship prevention and automatic acquisition parentage tracking (`crm_account_parent_history`).
- **Strategic Account Threshold ("★ Strategic")**: Any client account whose rolling twelve-month (TTM) invoiced revenue accounts for 20% or more of total company revenue is automatically designated with a prominent `★ Strategic` gold badge across all views, search dropdowns, and pipeline summaries.

Practical Workflow Example 13.1: Modeling Novolex Corporate vs. Kalamazoo Plant

- **Scenario**: Sales rep Carlos models Novolex Corporate HQ and sets up the Kalamazoo manufacturing plant as a subsidiary site.
- **Step-by-Step Procedure**:
- Click **CRM** (`#nav-item-crm`) -> **Accounts & Sites** (`#tab-crm-accounts`).
- Click **New Account** (Figure 10, Callout 1). Enter Name: `Novolex Corporate HQ` , Type: `Corporate HQ` , Industry: `Packaging & Paper` . Click Save.
- Click **New Account** again. Enter Name: `Novolex - Kalamazoo Plant` , Type: `Plant/Site` , Parent Account: `Novolex Corporate HQ` .
- Plant Details: EPA Facility ID `110000492811` , Operating Units: `4 Extrusion Lines` , Critical Assets: `180 Monitored Bearings` , Address: `1200 Mill St, Kalamazoo, MI` .
- Click Save. The tree table (Figure 10, Callout 3) nests the Kalamazoo Plant neatly beneath Novolex Corporate HQ!

13.2 Decision-Maker Contacts, Temporal Affiliations & Exact Email Deduplication

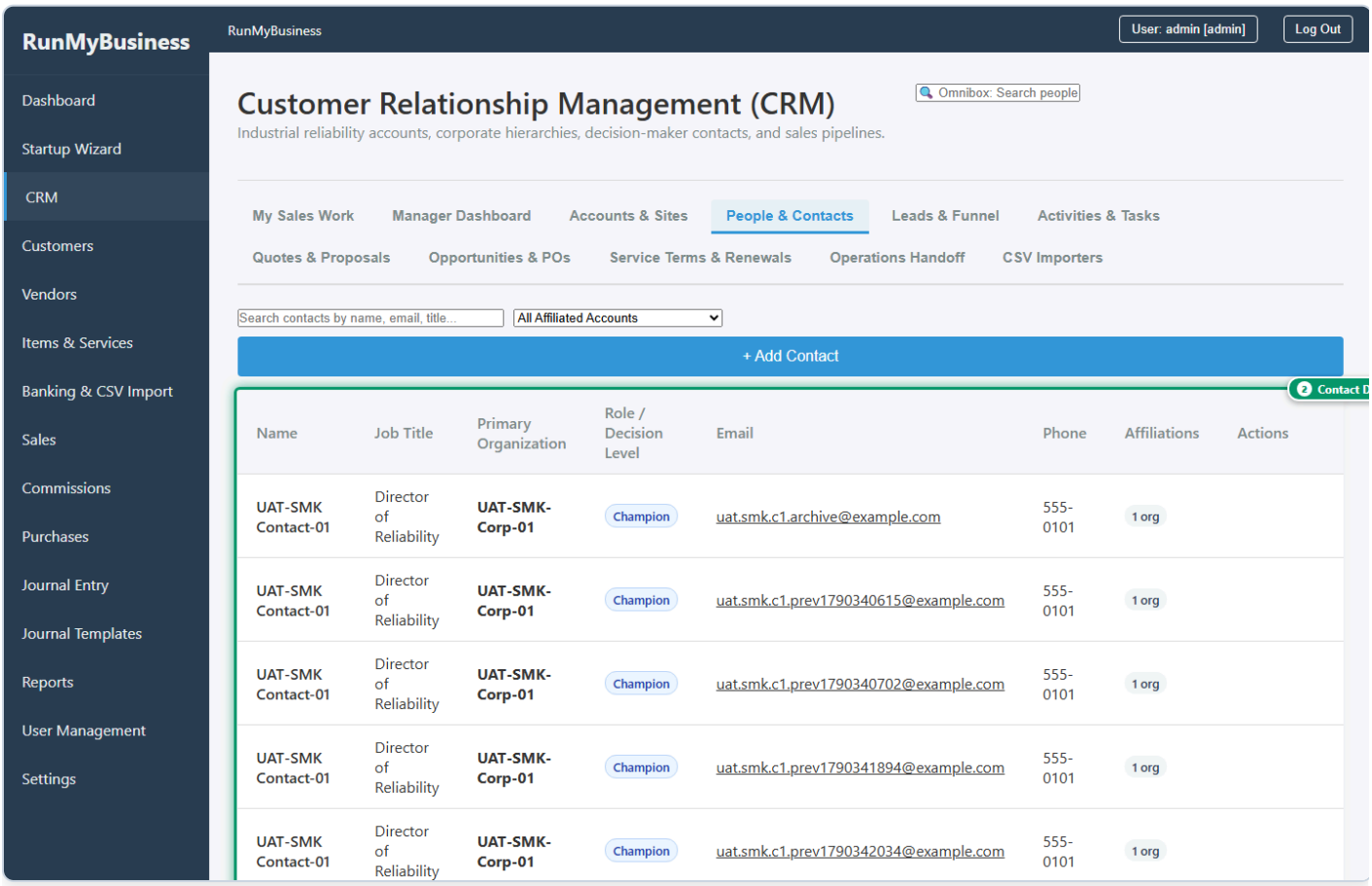


Figure 11: Contact directory, multi-plant temporal affiliations, and exact email deduplication.

Visual Callout Reference — Figure 11

Callout	Element & Target	Control Type	Operational Function & System Behavior
`[1]`	**Register Decision-Maker** (`#crm-new-person-btn`)	Modal Button	Launches contact modal capturing full name, email, direct phone, mobile, and primary plant affiliation.
`[2]`	**Contact Directory & Deduplication** (`#crm-people-table`)	Data Table	Master people directory displaying active employer, title, influence role, and verified unique email address.
`[3]`	**Cross-Plant Affiliation Filter** (`#crm-person-search`)	Filter Input	Fast search filtering contacts across corporate parent and regional plant locations.

Deduplication & Temporal Multi-Account Affiliations

- **Strict Email Deduplication Principle**: Human contacts (`CrmPerson`) are stored exactly once in the system, keyed by unique email address. This prevents fractured contact histories and duplicate communication logs across disparate sales campaigns.
- **Temporal Multi-Account Affiliations (`CrmPersonAffiliation`)**:

- Contacts maintain multiple affiliations across plants over time with `is_primary` and `is_current` indicators.
- Preserves unbroken historical communication logs, quote deliveries, and activity audits across the contact's career trajectory.

Practical Workflow Example 13.2: Registering a Multi-Site Reliability Director

- **Scenario**: Omar registers David Miller, Regional Reliability Director who oversees both Novolex Kalamazoo and Coldwater plants.
- **Step-by-Step Procedure**:
- Click **People & Contacts** (`#tab-crm-people`) -> **New Person** (Figure 11, Callout 1).
- Enter Name: `David Miller`, Email: `dmiller@novolex.com`, Phone: `269-555-0100`, Title: `Regional Reliability Director`, Influence Level: `Economic Buyer`.
- Primary Affiliation: `Novolex - Kalamazoo Plant` (check `is_primary`). Click Save.
- Edit David Miller -> Affiliations tab -> Click **Add Affiliation**. Select `Novolex - Coldwater Plant`, Title: `Director of Maintenance Oversight`.
- **Verification**: If another rep attempts to create a new person with `dmiller@novolex.com`, the system blocks the duplicate: "*A contact with email dmiller@novolex.com already exists (David Miller). Please manage affiliations instead.*"

13.3 Lead Funnel, 1-Day Response SLA & Qualification Workflows

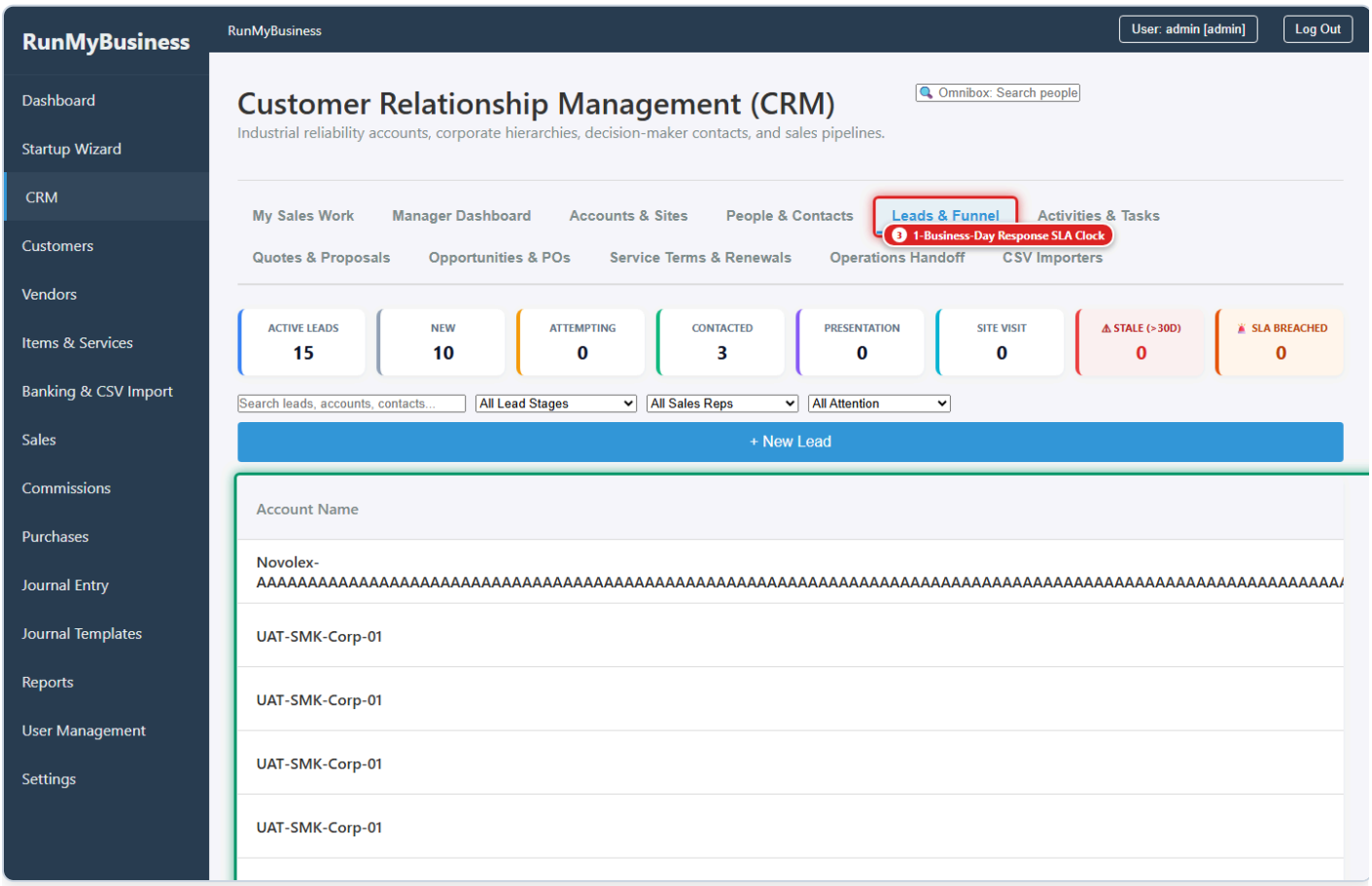


Figure 12: Lead intake funnel, qualification stages, and 1-business-day response SLA countdown clock.

Visual Callout Reference — Figure 12

Callout	Element & Target	Control Type	Operational Function & System Behavior
`[1]`	**Intake New Sales Lead** (`#crm-new-lead-btn`)	Modal Button	Opens the lead intake modal to record prospect name, company, email, lead source, and initial notes.
`[2]`	**Funnel Pipeline & Status** (`#crm-leads-table`)	Data Table	Tracks leads across 8 lifecycle stages with assigned sales representative and contact information.
`[3]`	**1-Business-Day Response SLA Clock** (`#tab-crm-leads`)	Badge Indicator	Live timer calculating hours elapsed since lead creation. Breaches (>24 business hours) turn bright amber/red.

8-Stage Lead Lifecycle Funnel & 24-Hour SLA

1. `New Lead` (24h SLA Active) -> 2. `Attempting Contact` -> 3. `Contacted` -> 4. `Presentation Scheduled` -> 5. `Presentation Completed` -> 6. `On-Site Scheduled` -> 7. `On-Site Completed` -> 8. `Converted to Opportunity`.

Practical Workflow Example 13.3: Processing Inbound Lead under 24-Hour SLA

- **Scenario**: Trade show lead arrives from Sarah Connor, Plant Engineer at Graphic Packaging.
- **Step-by-Step Procedure**:
- Click **Leads & Funnel** (`#tab-crm-leads`) -> **New Lead** (Figure 12, Callout 1).
- Enter Name: `Sarah Connor`, Company: `Graphic Packaging - Kalamazoo Mill`, Email: `sconnor@graphicpkg.com`, Source: `Trade Show 2026`. Click Save.
- The lead appears in status `New Lead` with a green `SLA: 23h remaining` badge (Figure 12, Callout 3).
- Rep calls Sarah within 3 hours. Rep clicks **Log Activity** -> Phone Call, notes: "*Discussed recurring gearbox overheating on Extruder Line 3.*"
- Rep updates Lead Stage to `Contacted`. The SLA clock stops with 100% compliance recorded in the audit trail!

13.4 Activity Tracking, Multichannel Engagement Log & Task Schedules

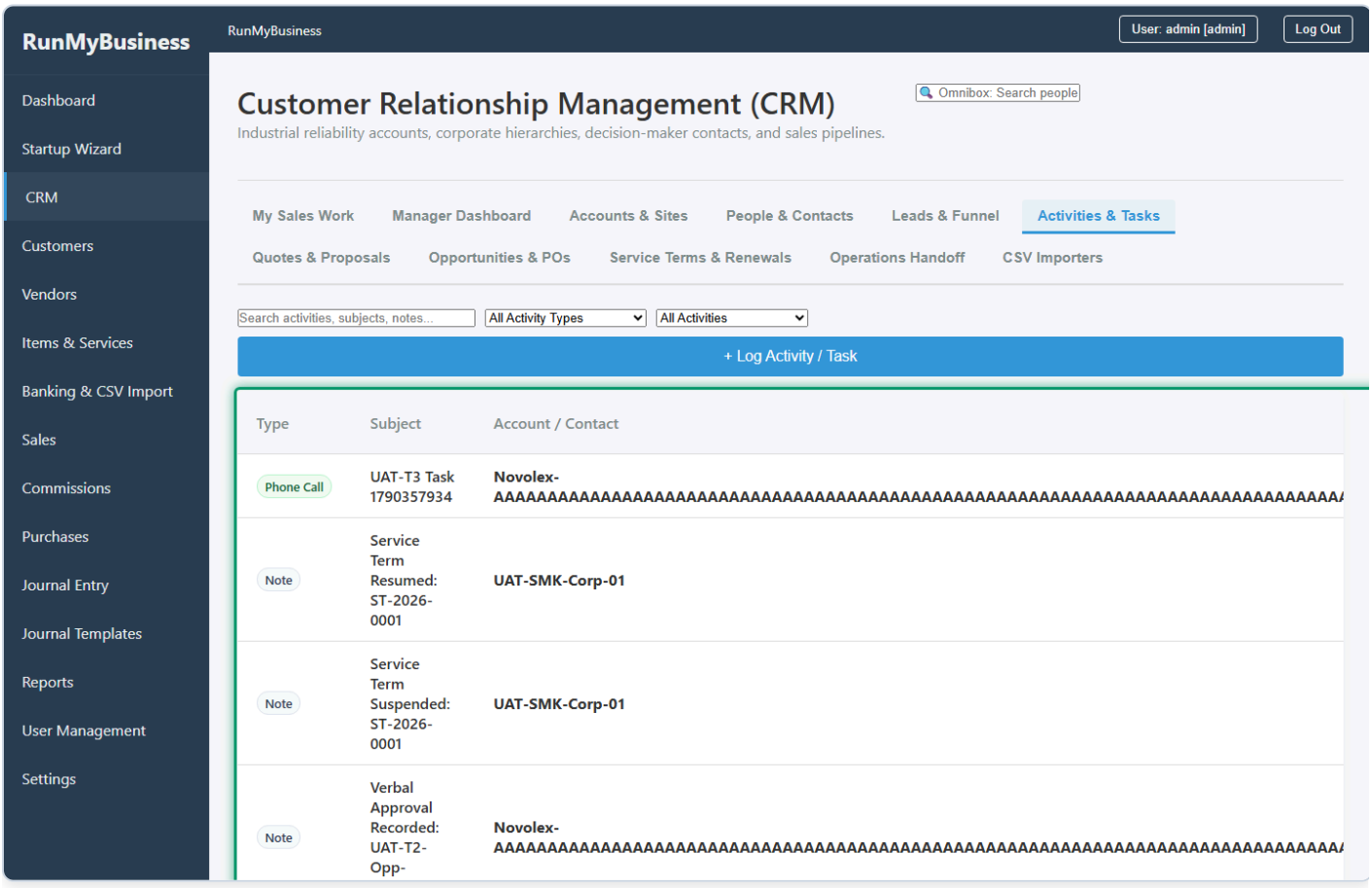


Figure 13: Multichannel activity journal, customer touchpoints, and scheduled task tracking.

Visual Callout Reference — Figure 13

Callout	Element & Target	Control Type	Operational Function & System Behavior
`[1]`	**Log Call / Meeting / Site Visit** (`#crm-log-activity-btn`)	Modal Button	Opens the activity logging dialog supporting 5 interaction channels with date, duration, and attendees.
`[2]`	**Multichannel Touchpoint History** (`#crm-activities-table`)	Data Table	Chronological audit trail of all customer interactions, auto-updating linked account touchpoint recency.

Practical Workflow Example 13.4: Logging an On-Site Ultrasonic Survey

- **Scenario**: Field rep logs an on-site facility walk-through at Novolex Kalamazoo to inspect compressed air and bearing friction points.
- **Step-by-Step Procedure**:
- Click **Activities & Tasks** (`#tab-crm-activities`) -> **Log Activity** (Figure 13, Callout 1).
- Activity Type: `On-Site Visit` , Subject: `Pre-Contract Baseline Ultrasound Survey` .
- Link to Account: `Novolex - Kalamazoo Plant` , Contact: `David Miller` .
- Execution Date: `2026-09-18` , Duration: `120 mins` .
- Summary Notes: "*Surveyed 24 extruder drive gearboxes. Identified high decibel friction on Line 2 motor bearing. Client requested formal quote.*"
- Click **Save Activity**. The account record updates `last_touchpoint_at` to `2026-09-18` , resetting the stale account warning timer.

13.5 Commercial Opportunities, CPQ Proposals, 14-Day PO Clocks & Tolerance PO Matching

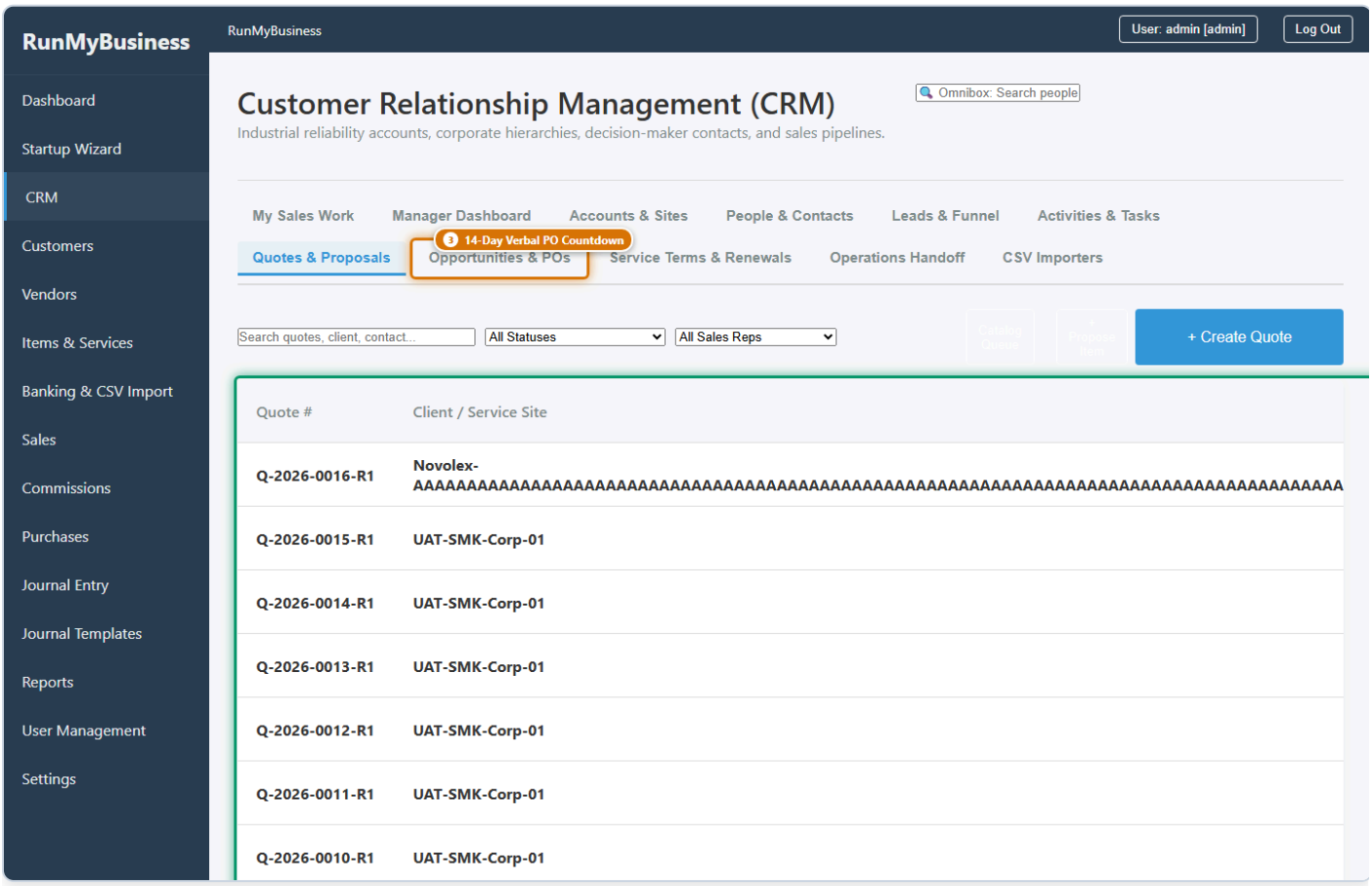


Figure 14: CPQ quote builder, margin indicators, and multi-tier discount approval gates.

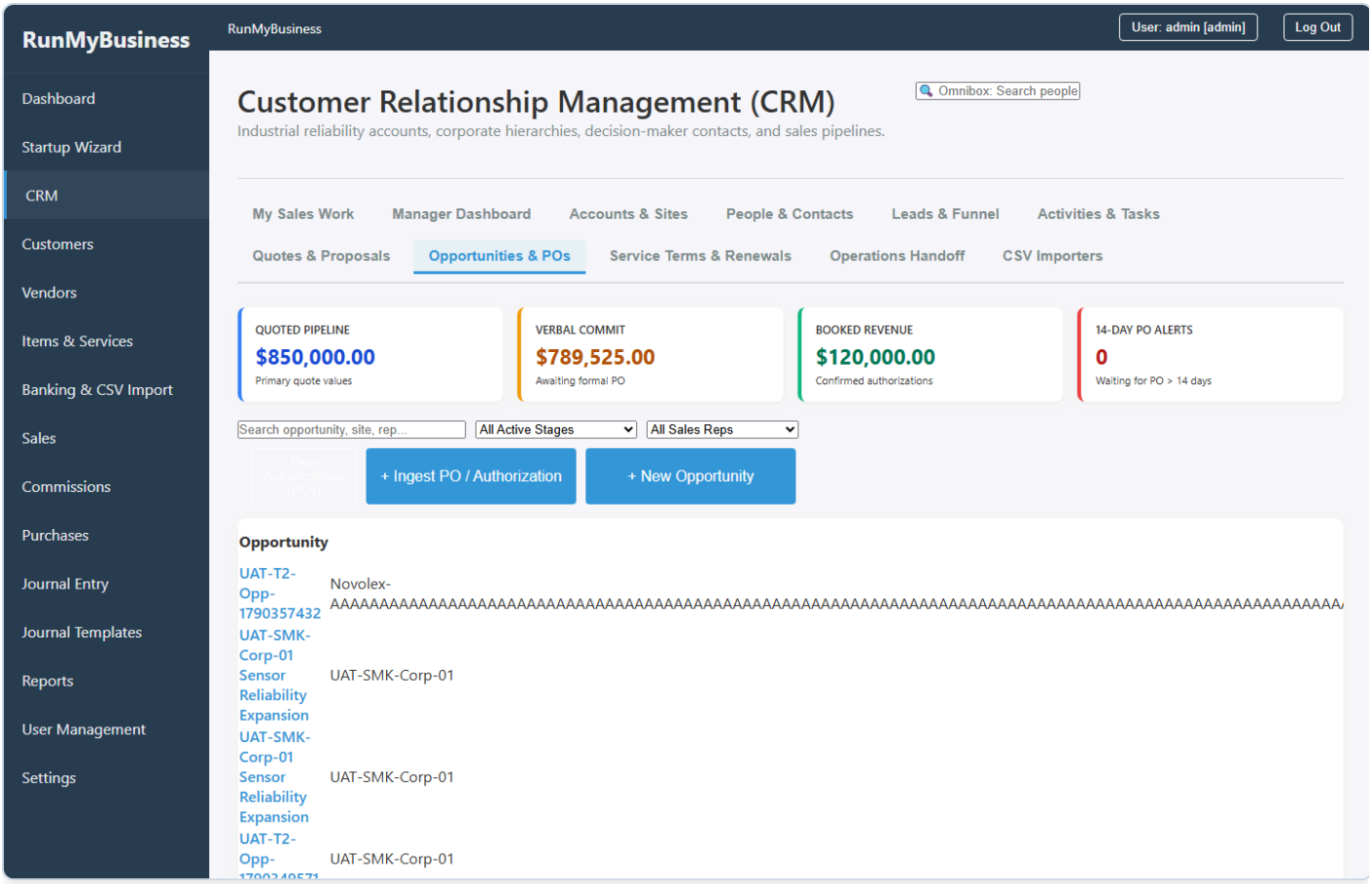


Figure 15: Commercial purchase order matching, 5% variance tolerance engine, and automated booking.

Visual Callout Reference — Figures 14 & 15

Callout	Element & Target	Control Type	Operational Function & System Behavior
`Fig 14 [1]`	**CPQ Quote Builder Trigger** (`#crm-new-quote-btn`)	Modal Button	Launches multi-item proposal builder supporting recurring service ARR, sensor hardware, and travel line items.
`Fig 14 [2]`	**Quotes & Gross Margin Table** (`#crm-quotes-table`)	Data Table	Displays quote revision history, contract TCV, calculated gross margin %, and discount status.
`Fig 14 [3]`	**14-Day Verbal PO Countdown** (`#tab-crm-opportunities`)	Navigation Tab	Opens Opportunities view tracking verbal awards against the 14-calendar-day purchase order arrival clock.
`Fig 15 [1]`	**Match Customer PO** (`#crm-match-po-btn`)	Modal Button	Opens the PO ingestion dialog to enter customer PO number, received date, and authorized amount.
`Fig 15 [2]`	**5% Tolerance Auto-Booking Engine** (`#crm-opportunities-table`)	Engine / Grid	Compares PO dollar value against quoted TCV. Automatically books deals within +/- 5% tolerance.

Practical Workflow Example 13.5: Proposal Quoting, Margin Approval & PO Auto-Booking

- **Scenario**: Rep quotes a $100,000.00 annual PdM program with a 15% discount ($85,000.00 final), which exceeds the standard 10% rep threshold.
- **Step-by-Step Procedure**:
- Click **Quotes & Proposals** -> **New Quote** (Figure 14, Callout 1).
- Select Account `Novolex - Kalamazoo Plant`, Proposal Title: `2026 Annual Predictive Maintenance Agreement`.
- Add Line: `Monthly Vibration & Ultrasound Analysis`, Qty: `12`, Rate: `$8,333.33` ($100,000.00 TCV).
- Rep applies 15% discount. The system calculates Gross Margin (62.5%) and triggers banner: "*15.0% discount requires Sales Manager Approval*".
- Quote saves in status `Pending Discount Approval`. Sales Manager reviews margin impact on Manager Dashboard and clicks **Approve Discount**.
- Rep emails quote PDF to client. On Day 5, David Miller emails: "*Approved, PO coming.*" Rep marks Opportunity `Verbal Approval`.
- The system starts the **14-Day Verbal PO Clock** (Figure 14, Callout 3).
- On Day 8, customer issues PO `PO-NOV-2026-99` for `$84,500.00`.
- Click **Match PO** (Figure 15, Callout 1). The system calculates variance: `$84,500 vs $85,000` (-0.58% variance).
- Since -0.58% is within the **5% Tolerance Rule**, the system auto-books the deal, creates Service Term `ST-2026-0042`, locks salesperson commissions, and generates the operations handoff record!

13.6 Service Terms, Active Contracted Services, 80% Suspension Rule, 90-Day Renewals & Operations Handoff

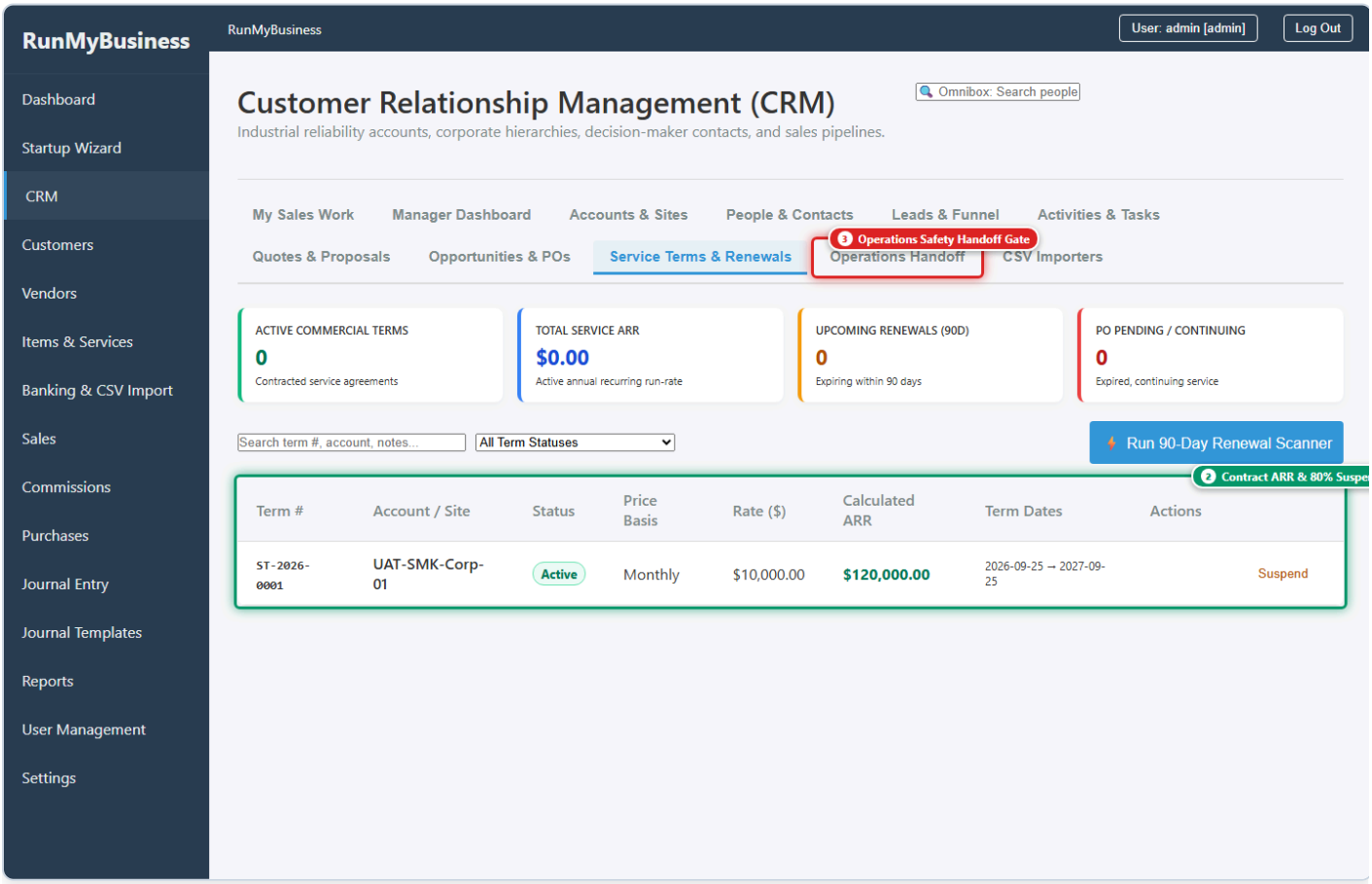


Figure 16: Active service terms, ARR tracking, 80% baseline suspension toggle, and renewal alerts.

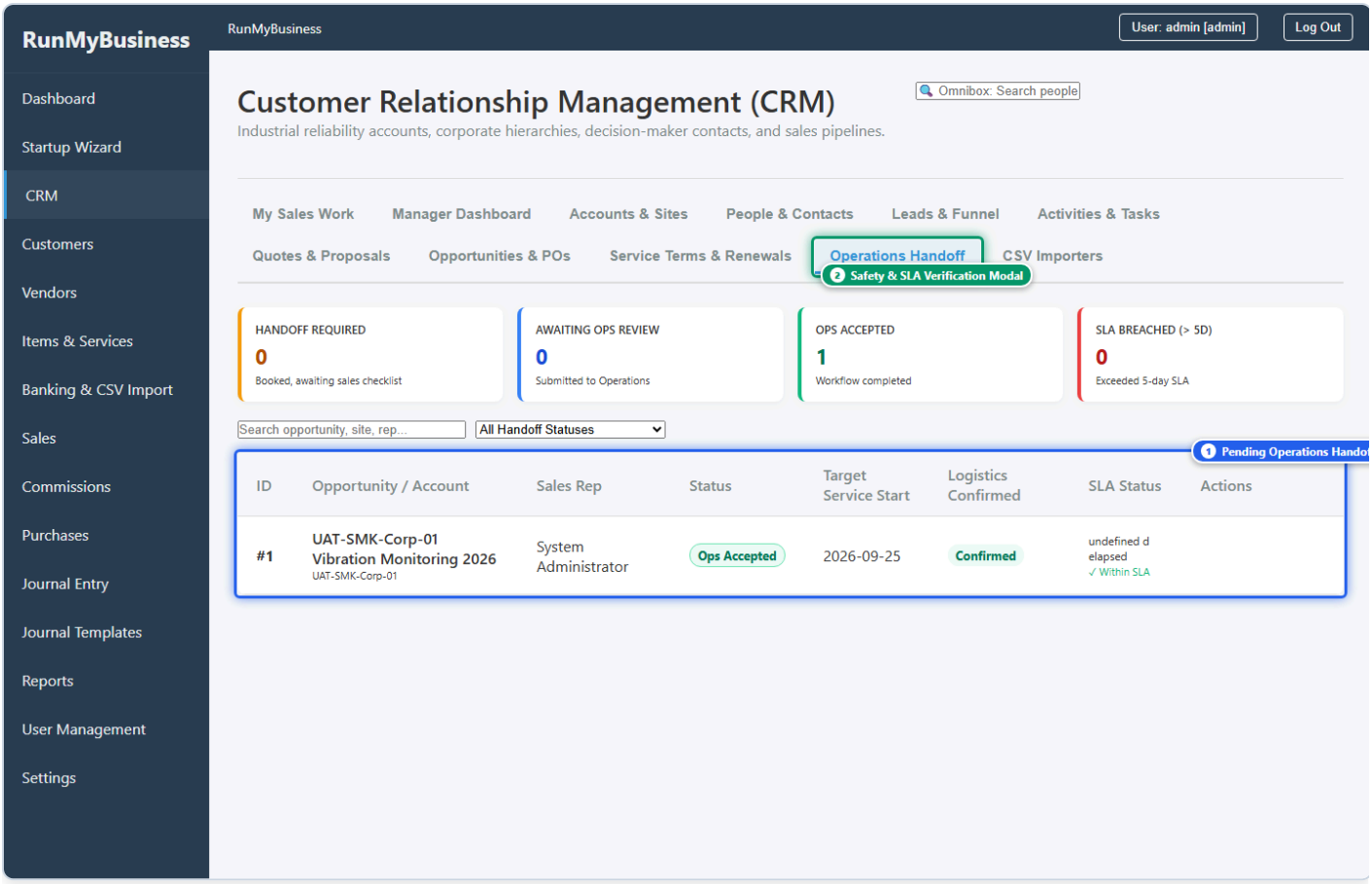


Figure 17: Operations handoff package, mandatory 5-point safety checklist, and technician acceptance gate.

Visual Callout Reference — Figures 16 & 17

Callout	Element & Target	Control Type	Operational Function & System Behavior
`Fig 16 [1]`	**Provision Recurring Service Term** (`#crm-new-term-btn`)	Modal Button	Provisions active service agreements with start/end dates, monthly billing rate, and calculated ARR.
`Fig 16 [2]`	**Contract ARR & 80% Suspension Status** (`#crm-terms-table`)	Data Table	Service agreements table tracking active status, ARR, renewal dates, and suspension billing state.
`Fig 16 [3]`	**Operations Safety Handoff Gate** (`#tab-crm-handoffs`)	Navigation Tab	Direct access to the Operations Handoff Queue to audit safety inductions, PPE, and technician dispatch readiness.
`Fig 17 [1]`	**Pending Operations Handoff Queue** (`#crm-handoffs-table`)	Data Table	Lists booked deals awaiting operational safety and scope verification before field dispatch.
`Fig 17 [2]`	**Safety & SLA Verification Modal** (`#tab-crm-handoffs`)	Audit Form	Mandatory 5-point checklist verifying site safety, PPE, machine schedules, sensor provisions, and contact leads.

Customer-Requested Suspension & 80% Baseline Billing Rule

- When a customer undergoes a major plant overhaul or turnaround, they can request a service suspension.

- Under RMB commercial rules, billing continues at an **80% baseline rate** (e.g. $8,500/mo drops to $6,800/mo) to preserve dedicated engineering staff and sensor calibrations.

Practical Workflow Example 13.6: Managing 80% Turnaround Suspension & Ops Handoff

- **Scenario**: Novolex notifies RMB of a 60-day plant turnaround outage starting November 1.
- **Step-by-Step Procedure**:
- Click **Service Terms & Renewals** (`#tab-crm-terms`).
- Locate Service Term `ST-2026-0042` ($8,500.00/month).
- Click **Actions** -> **Request Suspension**.
- Enter Reason: `Client Annual Extruder Line Turnaround Outage` , Effective Date: `2026-11-01` .
- The system flips status to `Suspended (80% Baseline Billing)` . Monthly invoicing automatically drops to `$6,800.00/month` ($8,500.00 x 80%).
- On January 1, when turnaround finishes, click **Resume Service**. Monthly invoicing restores automatically to `$8,500.00/month` .

13.7 Sales Work Queue, Executive Manager Overview, Universal Omnibox Search & Go-Live Data Migration Importers

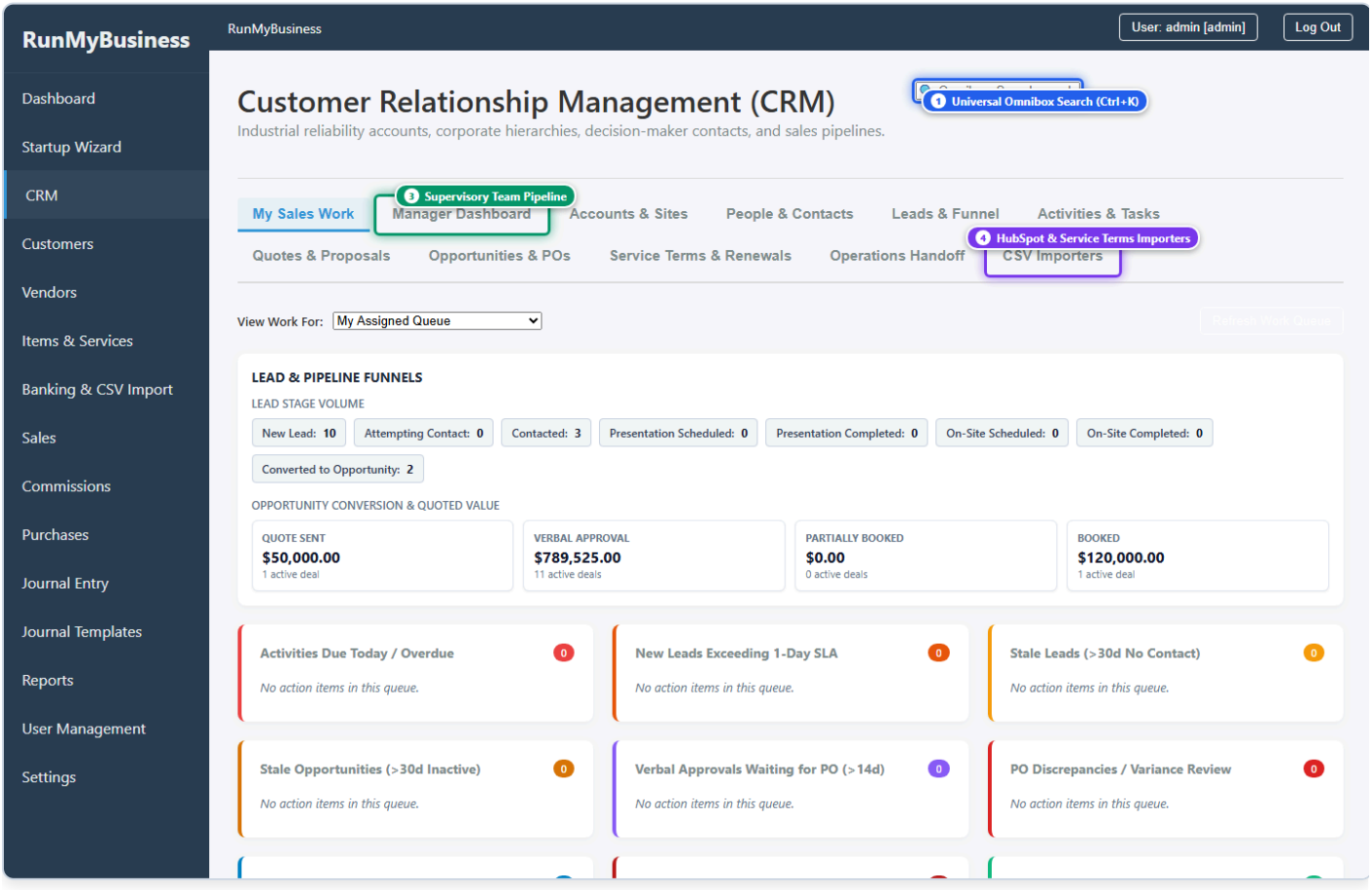


Figure 18: 11-card rep work queue, manager pipeline overview, universal omnibox search, and CSV importers.

Visual Callout Reference — Figure 18

Callout	Element & Target	Control Type	Operational Function & System Behavior
`[1]`	**Universal Omnibox Search (Ctrl+K)** (`#crm-global-search-input`)	Global Search	Instant fuzzy search across Accounts, Contacts, Opportunities, Quotes, POs, and Service Terms with 250ms debouncing.
`[2]`	**11-Card Sales Action Center** (`.crm-work-queue-card:nth-child(1)`)	Action Cards	Focused queue cards surfacing overdue tasks, leads past 1-day SLA, stale deals, verbal PO clocks, and renewals.
`[3]`	**Supervisory Team Pipeline** (`#tab-crm-manager-dashboard`)	Executive View	Sales Manager overview displaying aggregate quoted pipeline, verbal commitments, booked revenue, and rep scorecards.
`[4]`	**HubSpot & Service Terms Importers** (`#tab-crm-importers`)	Migration Tools	Go-live migration tools to bulk import historical HubSpot accounts/contacts/activities and active service contract CSVs.

Practical Workflow Example 13.7: Morning Field Rep Work Queue Triage

- **Scenario**: Sales rep Omar starts Monday morning prioritizing urgent deals and clearing action items.
- **Step-by-Step Procedure**:
- Click **CRM** -> **My Sales Work** (`#tab-crm-dashboard`).
- Inspect Figure 18, Callout 2: Card 1 (*Activities Due Today*) shows `3` ; Card 2 (*New Leads Past 1-Day SLA*) shows `1` .
- Click Card 2: Opens the overdue lead row. Rep immediately places phone call, logs activity, and advances status to `Contacted` .
- Press `Ctrl + K` or click the Omnibox (Figure 18, Callout 1). Type `Novolex` . Instant dropdown displays Novolex HQ, Kalamazoo Plant, David Miller (Contact), and Quote `Q-2026-0042` .
- Click Quote `Q-2026-0042` to jump directly into the proposal record in under 2 seconds!

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14. Company Settings, Security & Period Lock Dates

Configured under **Settings** (`#settings`):

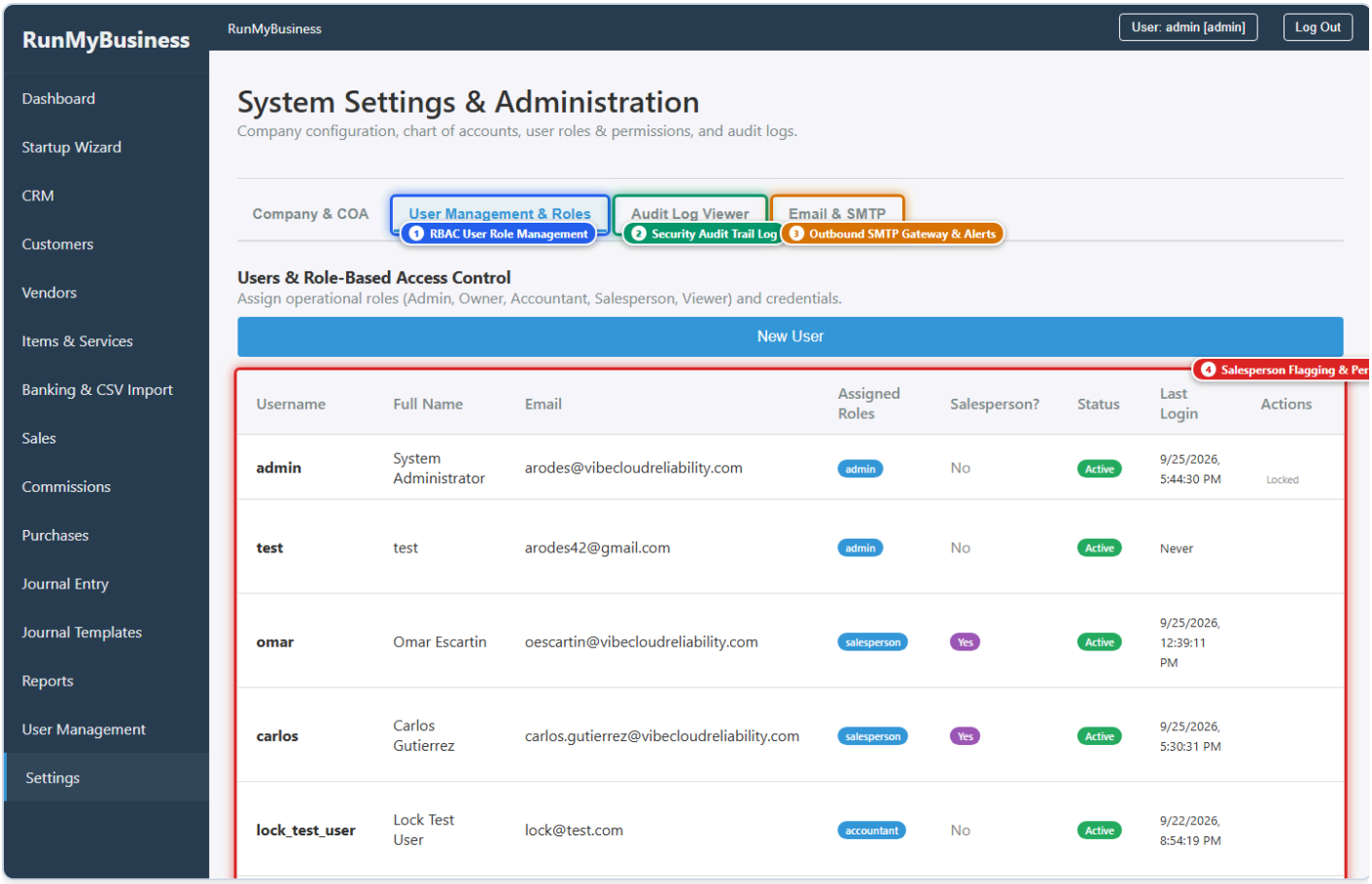


Figure 19: System settings, user role administration, security audit trail, and outbound SMTP configuration.

Visual Callout Reference — Figure 19

Callout	Element & Target	Control Type	Operational Function & System Behavior
`[1]`	**RBAC User Role Management** (`#tab-settings-users`)	Subtab	Accesses user administration table to create users, assign roles (`admin` , `owner` , `sales_manager` , etc.), and set passwords.
`[2]`	**Security Audit Trail Log** (`#tab-settings-audit`)	Subtab	Immutable audit log capturing user logins, manual overrides, batch approvals, and administrative configuration updates.
`[3]`	**Outbound SMTP Gateway & Alerts** (`#tab-settings-smtp`)	Subtab	Configures system email host, port, credentials, and TLS security for sending quote PDFs and reset tokens.
`[4]`	**Salesperson Flagging & Permissions** (`#pane-settings-users .data-table`)	User Grid	Master user directory indicating active accounts, salesperson flags (`is_salesperson = 1`), and assigned roles.

14.1 Practical Workflow Example: Provisioning a New Sales Representative

- **Scenario**: IT Administrator provisions a new field sales rep account for Carlos Gutierrez.
- **Step-by-Step Procedure**:
- Click **Settings** -> **User Management & Roles** (`#tab-settings-users` , Figure 19, Callout 1).

- Click **Add User**.
- Enter Username: `carlos`, Full Name: `Carlos Gutierrez`, Email: `carlos.gutierrez@vibecloudreliability.com`.
- Initial Password: Set secure password (e.g. `Welcome2026!`).
- Assigned Role: Select `salesperson`.
- Check box: **Is Salesperson** (`is_salesperson = 1`, ensures Carlos appears in commission filters and lead assignment dropdowns).
- Click **Save User**. Carlos can immediately log in, view his dedicated work queue, and manage client opportunities!

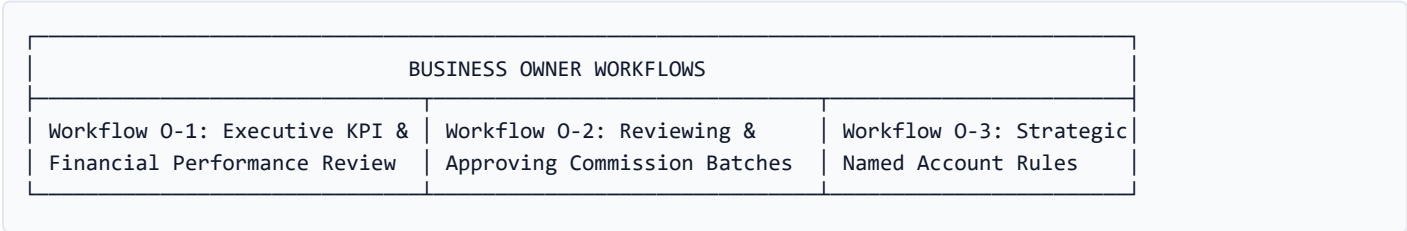
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15. Role-Specific End-to-End Workflow Examples

To illustrate how daily commercial operations are executed in RunMyBusiness, this section details **role-specific, step-by-step workflows** covering accounting, commissions, CRM, operations handoffs, and data migration.

15.1 Business Owner (`owner`) Workflows

The Business Owner holds strategic fiduciary oversight, reviews company-wide profitability, authorizes salesperson payouts, and establishes enterprise customer terms.



Workflow O-1: Executive Financial Review & Performance Monitoring

- **Business Objective**: Complete monthly executive performance review, evaluate cash position, check aging receivables, and analyze operating profitability before executive committee meetings.
- **Step-by-Step Procedure**:
- Open browser, navigate to `http://100.106.122.22:8000`, and log in with Owner credentials.
- The system loads the **Dashboard** (`#dashboard`):
    - Review the top KPI cards: verify **Cash in Bank**, **Accounts Receivable**, **Accounts Payable**, and **Net Income YTD**.
    - Inspect the **Action Center** panel (`.action-center`): check if any high-value customer invoices are flagged as 30+ days overdue.
- In the left sidebar, click **Reports** (`data-target="reports"`).
- Under Financial Reports, click **Profit & Loss** (`#report-pnl-btn`):
    - Set date filter to **Current Quarter**.
    - Click **Run Report**.

    - Review Gross Margin on Hardware vs. Services; examine total Sales Commission Expense (`#6050`) relative to total revenue.
- Click **Balance Sheet** (`#report-balance-sheet-btn`):
    - Verify that `Total Assets` perfectly matches `Total Liabilities + Total Equity` .
    - Inspect `Account #2150 Payroll Clearing / Accrued Commissions` to evaluate pending commission liability awaiting payroll clearance.
- Click **Print / Export PDF** to archive a snapshot of the quarterly financial statement.

Workflow O-2: Reviewing, Auditing, and Approving Sales Commission Payout Batches

- **Business Objective**: Review and formally approve the monthly commission payout for Carlos and Omar, ensuring all claimed earnings reflect fully paid invoices and correct rate tiering before payroll processing.
- **Step-by-Step Procedure**:
- In the sidebar, click **Commissions** (`#nav-item-commissions`).
- Click the **Payout Batches** tab (`#tab-comm-batches`).
- In the batches table (`#comm-batches-table`), locate the batch in **`Submitted`** status (e.g. `BATCH-2026-09-CARLOS` , Total: `$4,311.50` , 9 records).
- Click **View Items / Audit** (`.batch-view-btn`) to expand the itemized batch detail modal:
    - Confirm that each invoice row displays **`Open Balance: $0.00`** (verifying the 100% Paid rule).
    - Check applied commission rates (e.g., Carlos's flat 5.0% on hardware and service lines).
    - Verify that sales tax and shipping pass-through charges are completely excluded from commissionable revenue.
- Close the detail modal.
- On the batch table row, click **Approve** (`#batch-approve-btn`).
- In the confirmation modal, review the total disbursement liability and click **Confirm Executive Approval**.
- The batch status transitions to **`Approved`** :
    - The system records the Owner's user ID and UTC timestamp in the database.
    - The batch becomes immutable; accounting can now generate the ADP export and disburse payment.

Workflow O-3: Establishing Strategic Named Account Customer Commission Rules

- **Business Objective**: Configure custom Tier-1 commission exception rates for a new strategic corporate client (e.g., *Novolex*), ensuring that Omar receives custom enterprise rates (2.5% Service, 3.75% Hardware, 0.5% Renewal) rather than standard baseline plan rates.
- **Step-by-Step Procedure**:
- In the sidebar, click **Commissions** (`#nav-item-commissions`).
- Click the **Plans & Rules** tab (`#tab-comm-plans`).
- Scroll to the **Named Account Exception Rules (Tier 1)** section.
- Click **Create Named Rule** (`#create-named-rule-btn`).
- In the custom modal dialog:

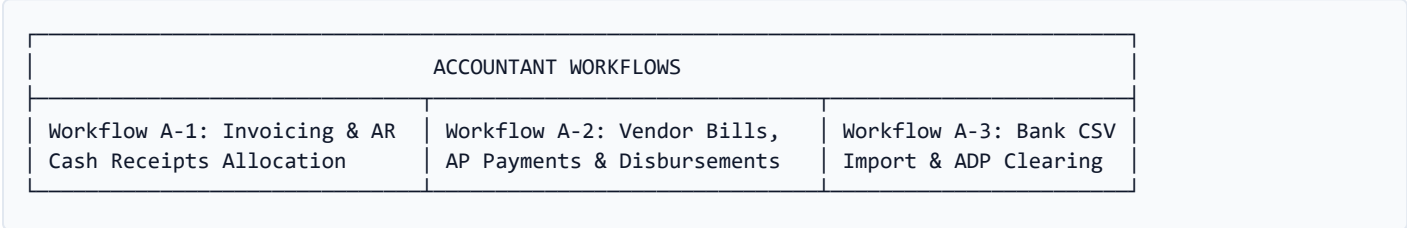
    - **Customer** (`#rule-customer-id`): Select `Novolex` from the customer dropdown.
    - **Salesperson** (`#rule-user-id`): Select `Omar Escartin` (or leave blank to apply to all reps selling to Novolex).
    - **New Service Rate (%)** (`#rule-rate-svc`): Enter `2.5` .
    - **New Hardware Rate (%)** (`#rule-rate-hwd`): Enter `3.75` .
    - **Renewal Rate (%)** (`#rule-rate-ren`): Enter `0.5` .
    - **Noncommissionable Rate (%)** (`#rule-rate-noncomm`): Enter `0.0` .
- Click **Save Rule**.
- Verify rule enforcement using the **Rate Preview Simulator** (`#comm-rate-preview-form`) at the bottom of the screen:
    - Select Customer: `Novolex` .
    - Select Salesperson: `Omar Escartin` .
    - Click **Resolve Rates** (`#preview-resolve-btn`).
    - Verify that the simulator returns a green badge reading: "*Tier 1: Named Account Customer Rule*" with rates: `2.5% Svc / 3.75% Hwd / 0.5% Ren` .

Workflow O-4: Supervisory Pipeline Review & Authorizing Quote Discounts

- **Business Objective**: Inspect company-wide CRM sales funnel health, audit representative conversion velocity, and authorize a pending price discount on a competitive quote.
- **Step-by-Step Procedure**:
- In the sidebar, click **CRM** (`#nav-item-crm a`).
- Click the **Manager Dashboard** subtab (`#tab-crm-manager-dashboard`).
- Inspect the executive summary cards:
    - **Quoted Pipeline** (`#mgr-pipeline-quoted`): Audit total active proposal volume across the sales team.
    - **Verbal Commit** (`#mgr-pipeline-verbal`): Review deals awaiting client purchase orders.
    - **Booked Revenue** (`#mgr-pipeline-booked`): Verify year-to-date booked recurring contracts.
    - **Renewals ARR** (`#mgr-renewals-arr`): Review contract value expiring within 90 days.
- Review the **Company-Wide SLA Exceptions Grid**:
    - Verify counts for **Leads Past 1-Day SLA**, **Verbal Deals Waiting >14d**, and **Operations Handoffs Breaching 5-Day SLA**.
- In the **Salesperson Performance Breakdown** table (`#mgr-salesperson-table`), evaluate rep metrics: active leads, active deals, booked revenue, Teams presentations completed, and on-site plant walkthroughs.
- Scroll to the **Pending Discount Approvals Queue** table (`#mgr-discount-approvals-table`):
    - Locate quote `Q-2026-0088` (Novolex Kalamazoo, Carlos Gutierrez, `$92,000.00` , 8% discount).
    - Click **Approve**: System executes discount authorization with a custom modal confirmation, advancing the quote to approved status and allowing Carlos to deliver the proposal to the client.

15.2 Accountant / Bookkeeper (`accountant`) Workflows

The Accountant manages day-to-day transaction entry, creates customer invoices, collects payments, pays vendor bills, reconciles bank accounts, and manages payroll clearing.



Workflow A-1: Customer Invoicing, Sales Tax, and Payment Allocation (AR)

- **Business Objective**: Issue a \$10,000 service invoice to a corporate customer, record sales tax, post the invoice, receive customer payment via ACH, and observe automatic commission unlocking.
- **Step-by-Step Procedure**:
- Log in with Accountant credentials.
- In the sidebar, click **Sales** (`data-target="sales"`).
- Click **Create Invoice** (`#create-invoice-btn`).
- Fill out the invoice modal:
    - **Customer**: Select `Acme Industrial Systems` .
    - **Invoice Date**: `2026-09-15` (ensure date is after the company lock date).
    - **Due Date**: `2026-10-15` (Net 30 terms).
    - **Customer PO#**: Enter `PO-ACME-8821` .
    - **Salesperson**: Select `Carlos Gutierrez` .
    - **Line Item 1**:
    - Item: `Predictive Vibration Monitoring Service` .
    - Category: `Service` , Type: `New` .
    - Quantity: `1` , Unit Price: `$10,000.00` .
    - Taxable: Checked (Sales Tax Rate: 8.25% = `$825.00`).
- Click **Save Invoice**:
    - System assigns Invoice Number `INV-2026-0144` , Total: `$10,825.00` , Open Balance: `$10,825.00` .
    - Automated GL Entry posted:
    - **Debit**: `#1200 Accounts Receivable` `$10,825.00`
    - **Credit**: `#4000 Service Revenue` `$10,000.00`
    - **Credit**: `#2200 Sales Tax Payable` `$825.00`
    - Linked Commission Record created for Carlos: Net Commissionable Revenue = `$10,000.00` (tax excluded!), Rate = `5.0%` , Commission = `$500.00` , Status = **`Pending`** .
- **Payment Receipt (Two weeks later)**: Customer sends full payment of `$10,825.00` via ACH.
- On the Sales screen, locate `INV-2026-0144` and click **Record Payment** (`.record-payment-btn`).

- In the modal:
  - Payment Date: `2026-09-29`.
  - Payment Method: `ACH / Direct Deposit`.
  - Reference: `ACH-TR-55421`.
  - Amount: `$10,825.00`.
- Click **Save Payment**:
  - Invoice Open Balance updates to **`$0.00`**; status becomes **`Paid`**.
  - Automated GL Entry posted:
  - **Debit**: `#1000 Operating Checking` `$10,825.00`
  - **Credit**: `#1200 Accounts Receivable` `$10,825.00`
  - Commission Engine automatically transitions Carlos's `$500.00` commission record from **`Pending`** to **`Eligible`** for the September payout batch.

Workflow A-2: Vendor Bill Ingestion, AP Scheduling, and Cash Disbursement

- **Business Objective**: Record a vendor purchase bill for replacement vibration sensors from a supplier, schedule the disbursement, and print or issue an ACH payment.
- **Step-by-Step Procedure**:
- In the sidebar, click **Purchases** (`data-target="purchases"`).
- Click **Create Bill** (`#create-bill-btn`).
- Fill out the vendor bill form:
  - **Vendor**: Select `Broadsens Technology Inc.`.
  - **Bill Number**: Enter vendor's invoice number `BSI-99412`.
  - **Bill Date**: `2026-09-18`.
  - **Due Date**: `2026-10-18`.
  - **Line Item**:
  - Account: `Account #5100 Hardware Components & Sensors` (Cost of Goods Sold).
  - Description: "*Replacement wireless triaxial accelerometer units (10 pack)*".
  - Amount: `$4,500.00`.
- Click **Save Bill**:
  - Automated GL Entry posted:
  - **Debit**: `Account #5100 Hardware Components` `$4,500.00`
  - **Credit**: `Account #2000 Accounts Payable` `$4,500.00`
  - Bill appears on Accounts Payable schedule with Open Balance: `$4,500.00`.
- **Payment Disbursement**:
  - Locate bill `BSI-99412` on the Purchases list and click **Pay Bill** (`.pay-bill-btn`).
  - In the modal, select Payment Date: `2026-09-28`, Method: `Company Check`, Reference: `CHK-10492`, Disbursement Account: `Account #1000 Operating Checking`.

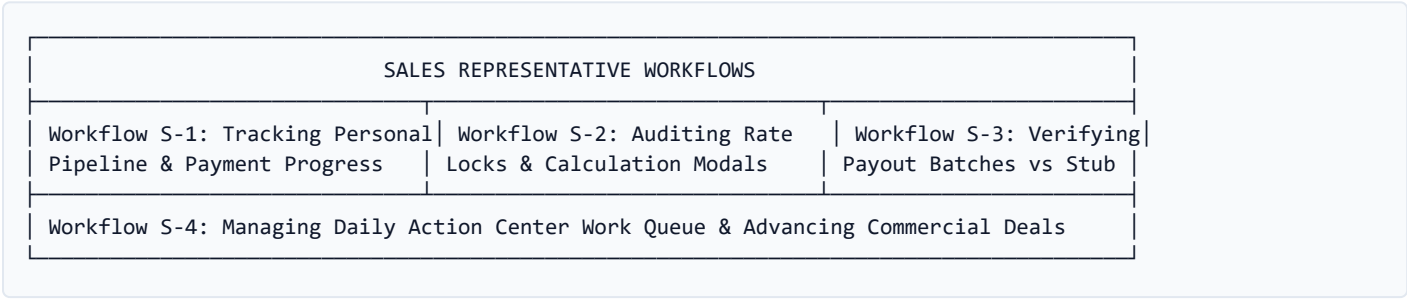
    - Click **Record Disbursement**:
    - Automated GL Entry posted:
        - **Debit**: `Account #2000 Accounts Payable` `$4,500.00`
        - **Credit**: `Account #1000 Operating Checking` `$4,500.00`
    - Bill balance updates to `$0.00` (`Paid`).

Workflow A-3: Monthly Bank Statement CSV Import & ADP Payroll Clearing Reconciliation

- **Business Objective**: Import the monthly bank statement CSV, reconcile customer receipts, and reconcile the consolidated ADP payroll debit against `Account #2150 Payroll Clearing` to eliminate duplicate expenses.
- **Step-by-Step Procedure**:
- In the sidebar, click **Banking & CSV Import** (`data-target="banking"`).
- Select target bank account: `Account #1000 Operating Checking` .
- Click **Choose File**, select `BankStatement_Sept2026.csv` , and click **Upload & Parse CSV**.
- The screen loads statement transaction rows into the reconciliation workbench:
    - *Row 1*: Deposit `$10,825.00` (Acme Industrial ACH). System highlights green: "*Matched to AR Payment #ACH-TR-55421*". Click **Confirm Match**.
    - *Row 2*: Withdrawal `-$4,500.00` (Check #10492). System matches to AP check payment. Click **Confirm Match**.
    - *Row 3*: Consolidated ADP Payroll Debit `-$18,450.00` (`ADP PAYROLL SERVICES WAGE/TAX/COMM`).
- Reconcile the ADP payroll transaction:
    - Click **Split / Map Transaction** (`.bank-split-btn`).
    - *Line A*: Wage & Salary Expense (`#6150`): `$12,000.00` .
    - *Line B*: Employer Payroll Taxes (`#6160`): `$2,138.50` .
    - *Line C (Commissions)*: Map to **`Account #2150 Payroll Clearing / Accrued Commissions`** : **`$4,311.50`** (matching Carlos's disbursed September commission batch!).
- Click **Save & Reconcile**:
    - Automated GL Entry posted:
    - **Debit**: `#6150 Salaries` `$12,000.00`
    - **Debit**: `#6160 Payroll Taxes` `$2,138.50`
    - **Debit**: `#2150 Payroll Clearing` `$4,311.50` (clearing the accrued liability established during batch disbursement back to **$0.00**!)
    - **Credit**: `#1000 Operating Checking` `$18,450.00` (cash withdrawal per bank feed)
- Verify on **Reports > Trial Balance**: `Account #2150` shows a net balance of **$0.00**, proving perfect, un-duplicated cash and expense reconciliation.

15.3 Sales Representative (`salesperson`) Workflows

Sales Representatives (such as Carlos and Omar) use the portal to track sales commissions, monitor customer payment statuses, inspect rate lock guarantees, manage their daily sales work queues, and audit monthly paystubs.



Workflow S-1: Tracking Personal Pipeline, Pending Earnings, and Customer Payment Progress

- **Business Objective**: Check current commission status, understand which invoices have been paid by clients, and identify pending invoices needing collections support.
- **Step-by-Step Procedure**:
- Navigate to `http://100.106.122.22:8000` and log in with Salesperson credentials (e.g. `carlos` / `Welcome2026!`).
- Click **Commissions** in the sidebar (`#nav-item-commissions`).
- The system opens the **Salesperson Personal Dashboard** (`#pane-comm-dashboard`):
    - Review personal summary metric cards:
    - **Pending Commissions**: Commissions earned on delivered invoices that customers have not yet paid.
    - **Eligible Commissions**: Commissions unlocked by full customer payment, ready for the next payout batch.
    - **Awaiting Approval**: Commissions submitted in a batch awaiting executive review.
    - **Approved**: Commissions authorized by the Owner, scheduled for upcoming payroll.
    - **Paid YTD**: Cumulative year-to-date commission payouts received.
- Scroll down to the **Commission Records Register** (`#comm-records-table`):
    - Filter by status: select **Pending**.
    - Inspect customer invoice rows: notice customer *Novolex* has invoice `INV-2026-0120` with `$3,200.00` open balance.
    - Note that once accounting records the customer's payment, this row will instantly transition to **Eligible**.

Workflow S-2: Auditing Commission Rate Locks & Line Item Mathematical Breakdowns

- **Business Objective**: Verify that a recent high-value contract was locked at the correct commission rate and inspect the exact mathematical formula used to calculate earnings.
- **Step-by-Step Procedure**:
- On the **Commissions** screen, click the **Awards & Rate Locking** tab (`#tab-comm-awards`).
- Locate customer PO `PO-2026-PAC-901` (Pactiv Evergreen renewal + site expansion):
    - Verify that rates are locked: `2.5% Service` , `3.75% Hardware` , `0.5% Renewal` .
    - Check **PO Received Date**: `2026-07-15` .

    - Verify that even if the company's global compensation plan was modified in August, this award strictly preserves its July locked rates.
- Switch back to the **Dashboard** tab (`#tab-comm-dashboard`).
- In the records table, locate the invoice row linked to this PO and click the **Explain** button (`.comm-explain-btn`).
- The **Calculation Breakdown Modal** opens:
    - Review the mathematical breakdown formula: $$\text{Commission} = (\text{Invoice Subtotal} - \text{Discounts}) \times \text{Locked Rate} \times \text{Rep Split \%}$$
    - Verify that sales tax (`$1,240.00`) was completely excluded from the commissionable base.
    - Confirm that the 100% rep split allocation was applied.
- Click **Close**. The rep has full mathematical transparency into their earnings.

Workflow S-3: Verifying Monthly Payout Batches Against ADP Paystubs

- **Business Objective**: Verify the contents of the monthly payout batch against the `"Sales Commission"` earnings item received on the ADP payroll paystub.
- **Step-by-Step Procedure**:
- On the **Commissions** screen, click the **Payout Batches** tab (`#tab-comm-batches`).
- Locate the batch for the current cycle: `BATCH-2026-09-CARLOS` :
    - Status: Displays **`Paid`** (or **`Approved`**).
    - Period Window: `2026-09-01` to `2026-09-30` .
    - Total Payout Amount: **`$4,311.50`** .
- Click **View Items** (`.batch-view-btn`) to review the 9 itemized invoices included in the payout:
    - Print or save the itemized statement for personal tax and accounting records.
- When the bi-weekly paycheck stub arrives from ADP:
    - Open the ADP mobile app or pay statement.
    - Locate the Earnings section line item: **`Sales Commission (COMM)`** .
    - Verify that the gross amount on the ADP paystub matches the RMB batch total exactly: **`$4,311.50`** .

Workflow S-4: Managing Daily Action Center Work Queue & Advancing Commercial Deals

- **Business Objective**: Review personalized exception work queue, complete scheduled phone calls, follow up on 14-day verbal approvals, and submit a booked contract for operations handoff.
- **Step-by-Step Procedure**:
- Log in with Sales Representative credentials (e.g. `carlos` / `Welcome2026!`).
- In the sidebar, click **CRM** (`#nav-item-crm a`).
- The system defaults to the **My Sales Work** dashboard (`#pane-crm-dashboard`):
    - Review the **Lead & Pipeline Funnels**: examine active volume in *Lead Stage Volume* (`#wq-lead-funnel`) and quoted dollar pipeline (`#wq-opp-funnel`).

    - Inspect the **Activities Due Today / Overdue** card (`#wq-activities-card`): locate call task "*Follow-up on Reliability Proposal*".
    - Click **Mark Done**: Custom modal opens; confirm completion with operational notes. Card badge instantly decrements.
- Inspect the **Verbal Approvals Waiting for PO (>14d)** card (`#wq-verbal-waiting-card`):
    - Notice deal *Pactiv Evergreen Oil Sampling* (`$75,000.00`) is waiting 19 days.
    - Click **Manage PO**: System routes immediately to the Opportunities tab, isolating the deal.
    - In the opportunity view, click **Log Activity** to schedule an urgent executive check-in with the plant purchasing director.
- Inspect the **Booked Deals Awaiting Operations Handoff** card (`#wq-booked-handoff-card`):
    - Deal *Novolex Multi-Year PdM* (`$102,000.00`) has been booked for 2 days.
    - Click **Open Handoff**: System opens the Operations Handoff tab.
    - Click **Submit Handoff** (`#btn-submit-handoff-701`).
    - Complete the mandatory 5-point checklist (Safety, Site Access, Plant Contacts, Scope Verified, Equipment List).
    - Check **Confirm Logistics Entered** and click **Submit to Operations**.
    - Handoff transitions to `Submitted to Operations` and clears from the rep's action queue.

15.4 Operations Director (`operations`) Workflows

Operations Directors and Field Service Leads utilize RunMyBusiness to audit incoming commercial contracts, review engineering and safety prerequisites, inspect recurring contracted machine scopes, and dispatch field technicians.

```
┌──────────────────────────────────────────────────────────────────────────────┐
│                            OPERATIONS DIRECTOR WORKFLOWS                     │
├──────────────────────────────────────────────────────────────────────────────┤
│ Workflow OP-1: Operations Handoff Review, Safety Checklist Verification & Acceptance   │
└──────────────────────────────────────────────────────────────────────────────┘
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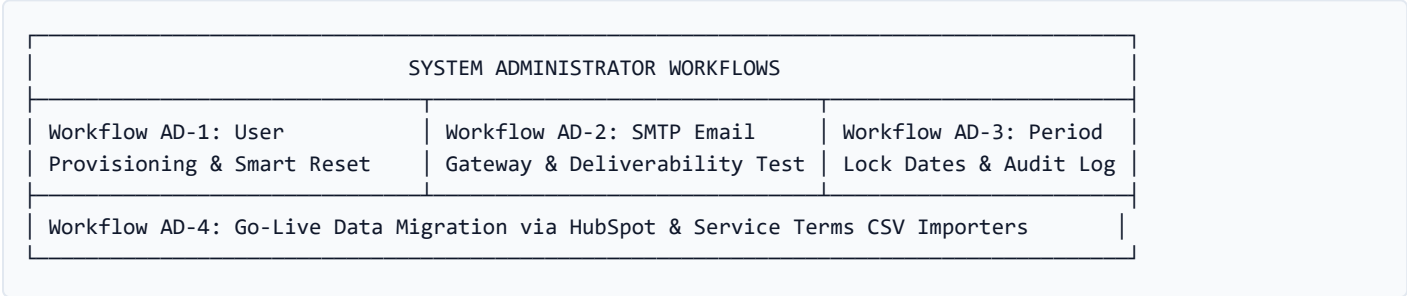
Workflow OP-1: Operations Handoff Review, Safety Verification & Acceptance

- **Business Objective**: Audit a commercial handoff package submitted by sales, verify site access and PPE arc-flash safety ratings, and either accept the contract or return it with corrective instructions.
- **Step-by-Step Procedure**:
- Log in with Operations credentials.
- In the sidebar, click **CRM** (`#nav-item-crm a`).
- Click the **Operations Handoff** subtab (`#tab-crm-handoffs`).
- Review the top KPI cards: verify **Handoff Required**, **Awaiting Review**, **Accepted**, and **SLA Breached (>5d)**.
- In the handoffs table (`#crm-handoffs-table`), locate the deal in `Submitted to Operations` status:
    - Click **Review Handoff** (`#btn-review-handoff-{id}`).

- The **Operations Review Modal** opens:
  - Inspect planned service start date, technician shift schedules, and special tooling notes.
  - Audit the 5-point checklist submitted by sales.
- **Scenario A (Return for Missing Requirements)**:
  - If plant arc-flash PPE ratings or site safety badges are missing:
  - In the Return Reason box (`#handoff-review-return-reason`), enter: "*Missing electrical panel NFPA 70E arc-flash PPE category ratings.*"
  - Click **Return to Sales**: Status becomes `Returned to Sales` . The deal immediately surfaces in the salesperson's work queue with the reviewer's feedback for rectification.
- **Scenario B (Acceptance & Scheduling)**:
  - When all site access credentials and equipment lists are confirmed:
  - Click **Accept Handoff**: Status updates to `Accepted` .
  - Operations schedules vibration route data collectors, and the agreement transitions to live delivery.

15.5 System Administrator (`admin`) Workflows

The System Administrator manages system security, provisions employee user accounts, configures the SMTP email gateway, enforces fiscal period close lock dates, and executes go-live data migration imports.



Workflow AD-1: User Provisioning, Salesperson Flagging, and Smart Reset Activation

- **Business Objective**: Onboard a new sales representative into RunMyBusiness, assign appropriate RBAC roles, enable salesperson tracking, and send an automated password setup email.
- **Step-by-Step Procedure**:
- Log in with Administrator credentials.
- In the sidebar, click **User Management** (`#nav-item-users`).
- Click **Add User** (`#add-user-btn`).
- Fill out the user creation modal:
  - **Username** (`#user-username`): `marcus.vance` .
  - **Full Name** (`#user-fullname`): `Marcus Vance` .
  - **Email Address** (`#user-email`): `mvance@vibecloudreliability.com` .
  - **Assigned Role** (`#user-role`): Select `salesperson` .

    - **Is Salesperson** (`#user-is-salesperson`): Check the box (enables commission award splits and tracking).
    - **Initial Temporary Password**: Set secure temporary password.
- Click **Save User**:
    - The system hashes the password using `bcrypt` and inserts records into `users` and `user_roles` .
- On the user list row for Marcus, click **Send Password Reset** (`.send-reset-btn`):
    - The backend **Smart URL Resolution Engine** (`app/email_service.py`) analyzes the request origin.
    - Resolves the production link using the Tailscale fallback IP: `http://100.106.122.22:8000/auth/reset-password?token=<secure_token>` .
    - Dispatches the welcome setup email directly to Marcus.

Workflow AD-2: Configuring System SMTP Email Gateway & Deliverability Verification

- **Business Objective**: Configure company SMTP credentials to enable transactional email delivery (invoices, password resets, payment receipts) and verify connection health.
- **Step-by-Step Procedure**:
- In the sidebar, click **Settings** (`data-target="settings"`).
- Click the **SMTP Email Settings** subtab (`#tab-settings-smtp`).
- In the SMTP configuration panel (`#pane-settings-smtp`):
    - **SMTP Host** (`#smtp-host`): Enter `smtp.sendgrid.net` (or company mail server).
    - **SMTP Port** (`#smtp-port`): Enter `587` .
    - **Security Protocol** (`#smtp-security`): Select `STARTTLS` .
    - **SMTP Username** (`#smtp-user`): Enter `apikey` .
    - **SMTP Password** (`#smtp-pass`): Enter secure API key credentials.
    - **Sender Email** (`#smtp-from`): `billing@runmybusiness.com` .
- Click **Save SMTP Settings** (`#save-smtp-btn`).
- **Live Connection Test**:
    - In the Test Email field (`#smtp-test-recipient`), enter `admin@runmybusiness.com` .
    - Click **Send Test Email** (`#test-smtp-btn`).
    - System performs an active SMTP handshake and transmits a test message.
    - Verify the live response banner: displays green checkmark: "*SMTP connection successful! Test email delivered in 840ms.*"

Workflow AD-3: Period Close Enforcement (Lock Dates) & Security Audit Log Inspection

- **Business Objective**: Execute monthly financial period close by setting a hard transaction lock date, verify that back-dated transaction tampering is blocked, and review security audit logs.
- **Step-by-Step Procedure**:
- In the sidebar, click **Settings** (`data-target="settings"`).

- Under the **Chart of Accounts & Company Close** pane (`#pane-settings-coa`), locate the **Company Close & Lock Date** card (`#card-lock-date-settings`).
- In the **Transaction Lock Date** input (`#company-lock-date`), select the closing date: **`2026-08-31`** .
- Click **Save Lock Date** (`#save-lock-date-btn`):
    - Confirmation modal opens; click **Confirm Lock Date Enforcement**.
    - Status indicator updates to a red badge: "*Transactions locked on or before 2026-08-31*".
- **Verification of Lock Enforcement**:
    - Switch to **Sales** > **Create Invoice**.
    - Attempt to create an invoice dated `2026-08-15` .
    - Click Save: System immediately blocks the submission with an error modal: "*Validation Error: Transaction date falls within a locked accounting period.*"
- **Security Audit Log Review**:
    - Switch to Settings > **Audit Log** subtab (`#tab-settings-audit`).
    - Review the immutable system event journal:
    - Verify logged events: user logins, failed password attempts, manual invoice-paid overrides, batch approvals, and lock date changes.
    - Confirm that each audit row includes the exact user ID, IP address, timestamp, action type, and before/after JSON diff.

Workflow AD-4: Go-Live Data Migration via HubSpot & Service Terms CSV Importers

- **Business Objective**: Bulk import legacy CRM data from HubSpot exports and provision active commercial service agreements from historical spreadsheets.
- **Step-by-Step Procedure**:
- In the sidebar, click **CRM** (`#nav-item-crm a`).
- Click the **CSV Importers** subtab (`#tab-crm-importers`).
- **HubSpot Migration Import**:
    - Click **Choose File** under HubSpot Importer (`#hubspot-file-input`) and select the exported contact/account CSV (or paste structured JSON records into `#hubspot-json-input`).
    - Click **Import HubSpot Data** (`#hubspot-import-btn`).
    - The system parses records, creates missing `Plant/Site` accounts, checks contacts against the unique email registry to prevent duplicates, and ingests historical interaction notes as `CrmActivity` records.
    - Review the inline summary banner (`#hubspot-import-result`): "✅ *Import Completed Successfully: Accounts Created: 3, Contacts Created: 4, Deduplicated: 2, Activities Ingested: 6*".
- **Active Service Terms Migration Import**:
    - Click **Choose File** under Active Service Terms Importer (`#terms-file-input`) and select the active customer service contract CSV (or paste JSON into `#terms-json-input`).
    - Click **Import Service Terms** (`#terms-import-btn`).

- The system provisions active `CrmServiceTerm` records with sequential `ST-YYYY-XXXX` identifiers, calculates ARR, and links contracted machine scopes.
- Review the inline summary banner (`#terms-import-result`): "✅ *Service Terms Import Completed: Commercial Agreements: 5, Total ARR Activated: $415,000.00*".
- Agreements are now live and automatically monitored by the 90-day renewal scanner.

Workflow AD-5: Complete Historical Migration & Go-Live Walkthrough

- **Business Objective**: Complete an end-to-end historical data migration from a legacy system (QuickBooks, NetSuite, Excel) into RunMyBusiness for a brand new company entity, verifying double-entry trial balance parity ($0.00 variance), reconciling AR/AP subledgers to the general ledger, and unlocking the production Go-Live gate.
- **Step-by-Step Procedure**:
- In the top navigation header, click the **Startup Wizard** button (`#btn-startup-wizard`) or navigate directly to `/onboarding` .
- **Step 1: Company Profile & Accounting Cutover Baseline**:
  - In the **Legal Company Name** field (`#wiz-legal-name`), enter `VibeCloud Reliability Systems LLC` .
  - In the **Entity Type** dropdown (`#wiz-entity-type`), select `LLC` .
  - In the **Fiscal Year Start Month** dropdown (`#wiz-fiscal-year-start`), select `1` (January).
  - In the **Accounting Cutover Date** picker (`#wiz-cutover-date`), select `2026-08-31` (the balance sheet close date of the legacy software).
  - In the **Transaction Lock Date** picker (`#wiz-lock-date`), select `2026-08-31` (locks historical periods against post-cutover modification).
  - Click **Save & Continue** (`#wiz-btn-step1-save`). The system updates company metadata and advances to Step 2.
- **Step 2: Chart of Accounts & Opening Balance Commit**:
  - Click **Download Accounts Template** (`#btn-download-tpl-accounts`) to obtain the canonical 5-column CSV template (`code,name,type,opening_balance,balance_type`).
  - Populate or drop your prepared legacy GL trial balance CSV onto the Accounts Dropzone (`#file-accounts`).
  - Click **Validate CSV** (`#btn-validate-accounts`). The engine parses rows in dry-run mode, checks that all account codes are unique numeric strings, and confirms normal balance classifications.
  - Review the pre-commit preview summary: "*Validation passed: 24 accounts verified, Debits: $248,500.00, Credits: $248,500.00, Offset Variance: $0.00*".
  - Click **Commit Accounts & Balances** (`#btn-commit-accounts`). The system atomically creates the chart of accounts and posts the balanced opening journal entry offsetting to `#3200 Opening Balance Equity` .
  - Click **Next: Customers & AR** (`#wiz-btn-step2-next`).
- **Step 3: Customers & Open Accounts Receivable**:
  - Click **Download Customers Template** (`#btn-download-tpl-customers`) and upload the active customer roster (`#file-customers`) by clicking **Upload Customers** (`#btn-upload-customers`).

    - Click **Download Open Invoices Template** (`#btn-download-tpl-open_invoices`) and upload the open receivables CSV (`#file-open_invoices`) by clicking **Upload Open Invoices** (`#btn-upload-open_invoices`).
    - The system provisions historical unpaid invoices dated on/before the cutover date, debiting `#1100 Accounts Receivable` and crediting `#3910 Migration Suspense` .
    - Confirm inline summary: "✅ *5 Open Invoices Created totaling $34,250.00 matching Account #1100*".
    - Click **Next: Vendors & AP** (`#wiz-btn-step3-next`).
- **Step 4: Vendors & Open Accounts Payable**:
    - Click **Download Vendors Template** (`#btn-download-tpl-vendors`) and upload the approved vendor roster (`#file-vendors`) via **Upload Vendors** (`#btn-upload-vendors`).
    - Click **Download Open Bills Template** (`#btn-download-tpl-open_bills`) and upload open payables (`#file-open_bills`) via **Upload Open Bills** (`#btn-upload-open_bills`).
    - The system provisions historical unpaid vendor bills, crediting `#2000 Accounts Payable` and debiting `#3910 Migration Suspense` .
    - The system verifies that `#3910 Migration Suspense` clears to exactly `$0.00` net variance.
    - Click **Next: Items & Services** (`#wiz-btn-step4-next`).
- **Step 5: Master Items & Services Catalog**:
    - Click **Download Items Template** (`#btn-download-tpl-items`) and upload product SKUs and service tiers (`#file-items`) via **Upload Items** (`#btn-upload-items`).
    - Ingested items populate with standard sale prices, unit costs, linked GL income/expense accounts, and default commission categories (`Hardware` , `Service` , `Noncommissionable`).
    - Click **Next: CRM Pipeline** (`#wiz-btn-step5-next`).
- **Step 6: CRM Master Data Pipeline Ingestion**:
    - Ingest operating plant facilities via **Upload CRM Sites** (`#btn-upload-crm_sites`), establishing industrial facilities linked to corporate accounts.
    - Ingest key personnel via **Upload CRM Contacts** (`#btn-upload-crm_contacts`), validating deduplicated emails and creating temporal affiliations.
    - Ingest open sales pipeline via **Upload CRM Leads** (`#btn-upload-crm_leads`), setting estimated deal ARR and sales stages.
    - Click **Next: Pre-Flight Audit** (`#wiz-btn-step6-next`).
- **Step 7: Automated Pre-Flight Audit & Go-Live Production Gate**:
    - Click **Run Pre-Flight Audit** (`#btn-run-preflight-audit`).
    - Inspect the 4 real-time integrity cards:
    - **Trial Balance Equilibrium** (`#audit-card-trial-balance`): Total Debits == Total Credits; GL Variance is exactly `$0.00` .
    - **AR Subledger Parity** (`#audit-card-ar-subledger`): Total Open Invoices matches GL `#1100 Accounts Receivable` to the cent.
    - **AP Subledger Parity** (`#audit-card-ap-subledger`): Total Open Bills matches GL `#2000 Accounts Payable` to the cent.

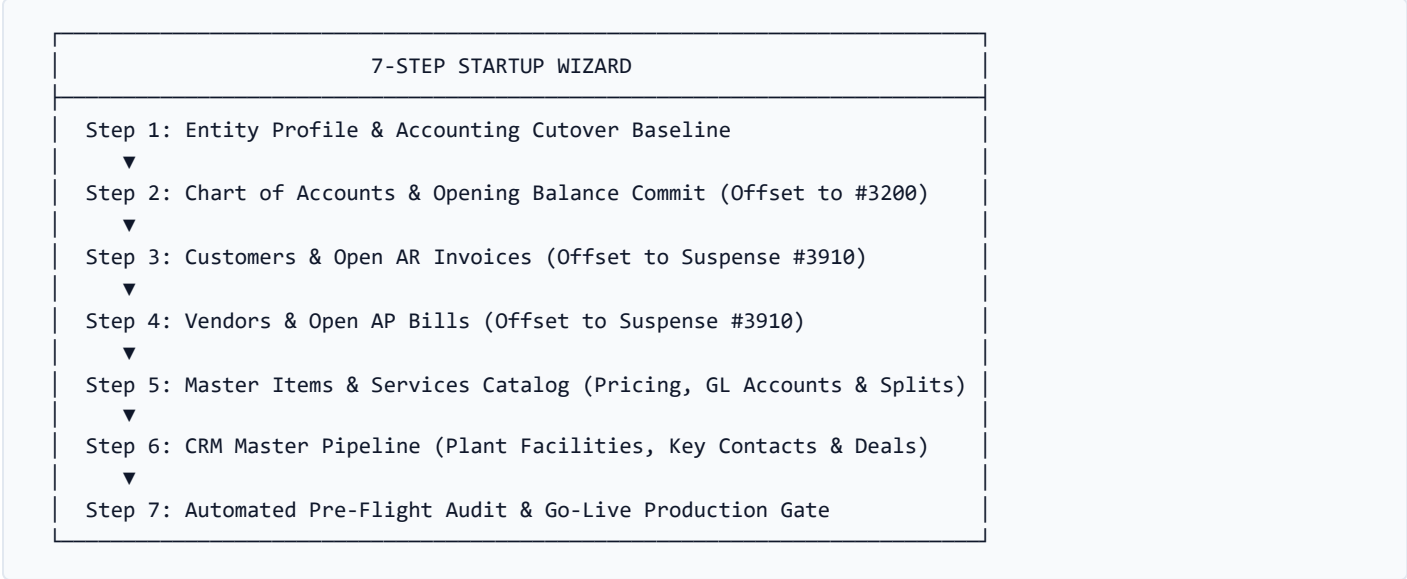
- **Migration Suspense Zero-Clear** (`#audit-card-suspense`): Account `#3910` balance is exactly `$0.00` .
- When all 4 checks display green verified badges, the 🚀 **Activate Go-Live** button (`#btn-activate-go-live`) turns active blue.
- Click **Activate Go-Live** (`#btn-activate-go-live`). In the confirmation modal, click **Confirm Go-Live Activation**.
- System seals the migration, transitions company status to `active` , enforces transaction lock date `2026-08-31` , and navigates to the live Executive Dashboard ready for production billing.

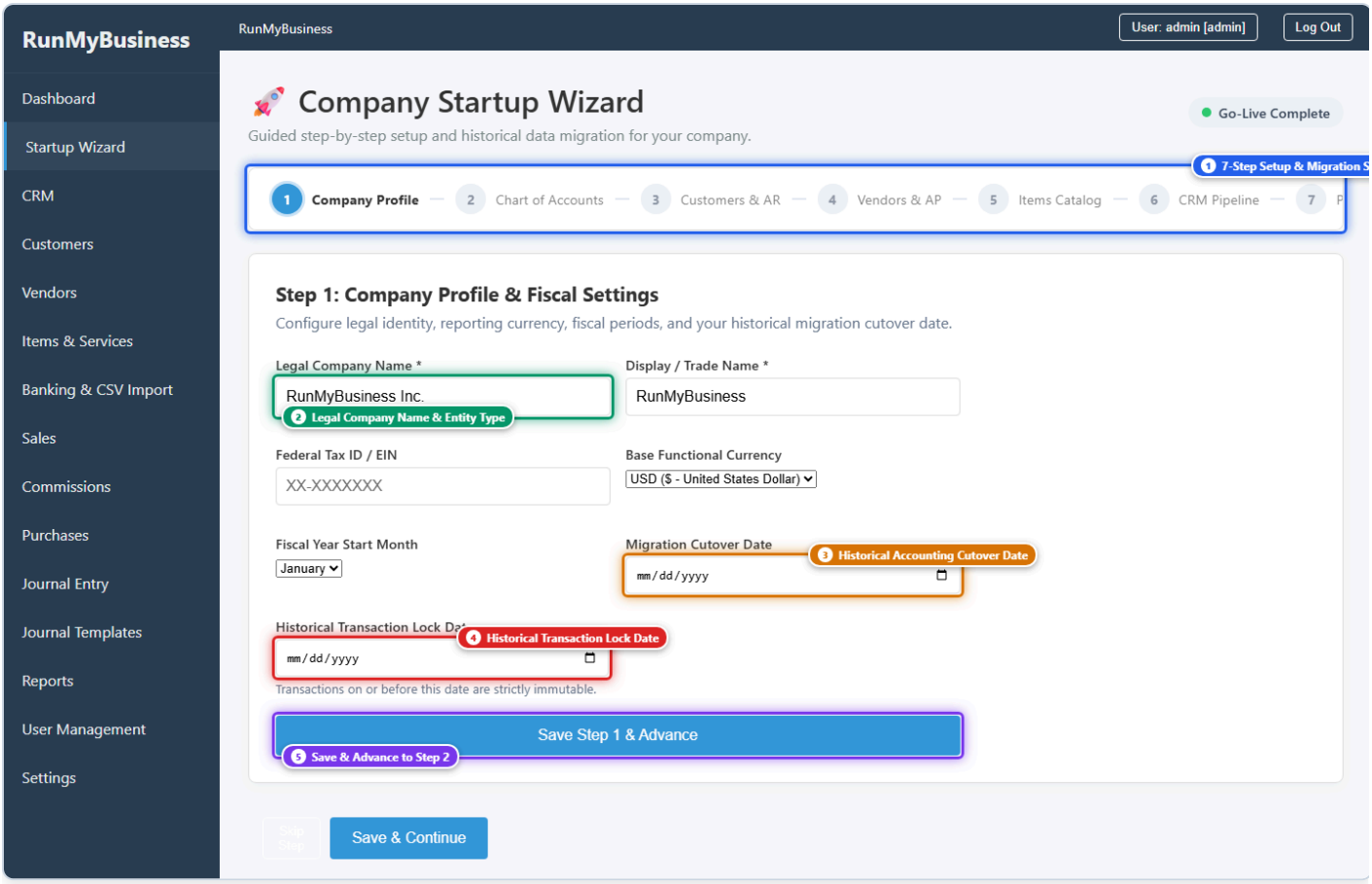
16. Company Startup Wizard & Historical Data Migration Engine

16.1 Overview & System Migration Lifecycle

Migrating an operating business from legacy accounting packages (QuickBooks, NetSuite, Xero, or disjointed spreadsheets) into an accrual-basis, double-entry ERP represents one of the most critical phases in corporate onboarding. Historical account balances must match prior-year tax returns to the penny, open customer invoices and unpaid vendor bills must transition without double-counting revenues or expenses, and sales pipeline data must populate seamlessly without disrupting daily field operations.

To guarantee zero data loss and eliminate post-migration accounting discrepancies, **RunMyBusiness** provides a dedicated, guided **Company Startup Wizard** (`#onboarding-stepper`). The wizard enforces a 7-step sequential ingestion and validation pathway:





The wizard incorporates strict validation guardrails at every tier: 1. **Double-Entry Equilibrium**: Total debits must equal total credits across all committed opening balances ($0.00 General Ledger variance). 2. **Subledger Parity**: Itemized open customer invoices must match GL Account `#1100 Accounts Receivable`, and open vendor bills must match GL Account `#2000 Accounts Payable`. 3. **Migration Suspense Neutrality**: Account `#3910 Migration Suspense` must clear to exactly `$0.00` before production activation is permitted. 4. **Hard Period Locking**: The cutover date automatically sets the company's initial transaction lock date, preventing retroactive tampering with historical baseline entries.

16.2 Step 1: Legal Entity Profile & Accounting Cutover

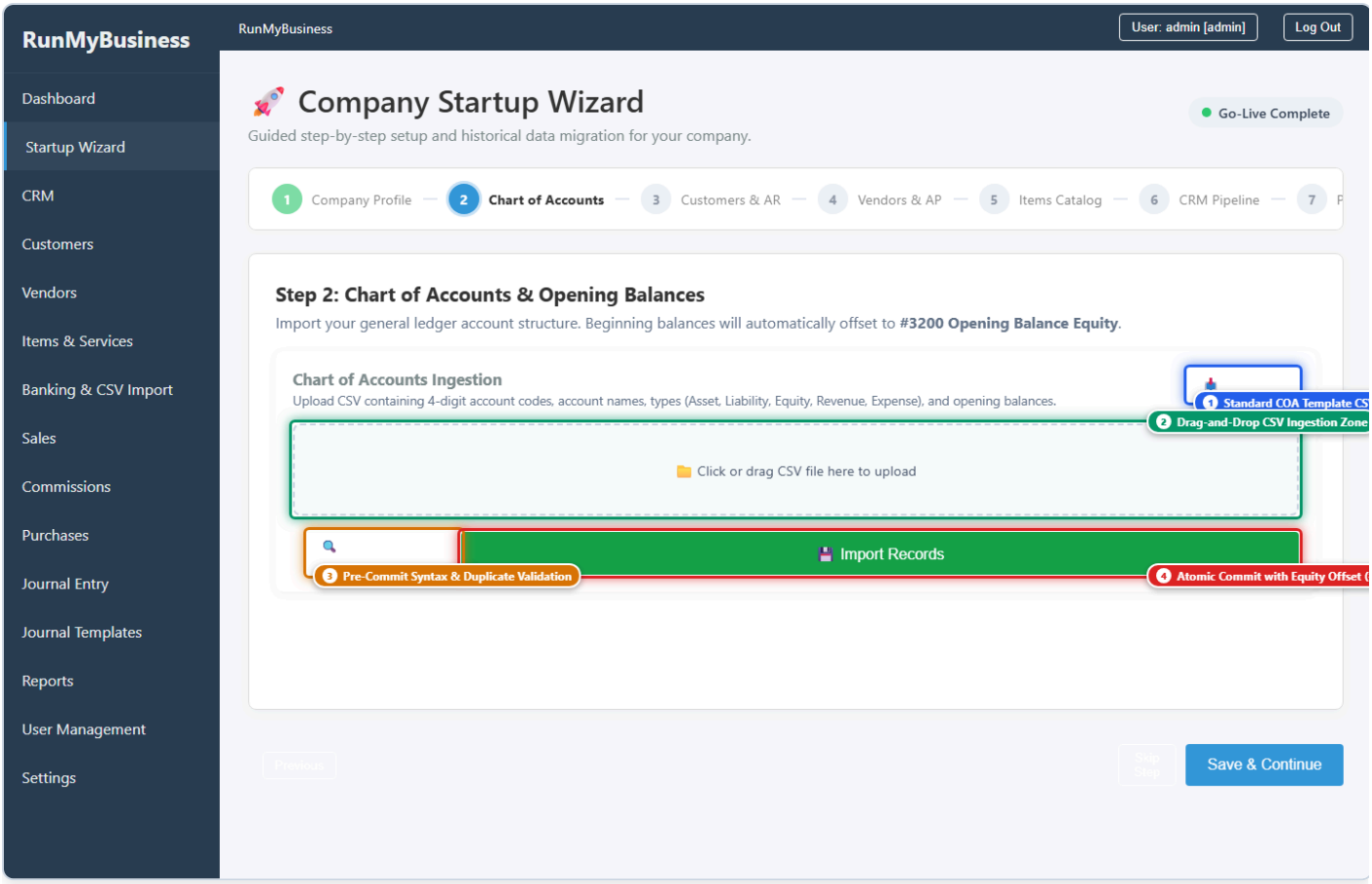
Step 1 establishes the legal and chronological baseline for the organization. All downstream financial calculations, fiscal calendars, and transaction locking rules derive from these core settings.

UI Control Label	HTML Element ID	Input Type / Options	Functional Role & Validation Rules
Step 1 Stepper Node	`#wizard-step-node-1`	Navigation Tab	Indicates Step 1 status (`pending` , `active` , `completed`).
Legal Company Name	`#wiz-legal-name`	Text Input	Formal corporate name (e.g. `Apex Reliability Systems LLC`). Mandatory.
Entity Type	`#wiz-entity-type`	Dropdown	Selects legal tax structure: `LLC` , `C-Corp` , `S-Corp` , `Partnership` , `Sole Proprietorship` .
Fiscal Year Start	`#wiz-fiscal-year-start`	Dropdown (1–12)	Starting month of corporate fiscal year (Default: `1` for January).
Cutover Date	`#wiz-cutover-date`	Date Picker (`YYYY-MM-DD`)	Final balance sheet date of legacy system (e.g., `2026-08-31`).
Historical Lock Date	`#wiz-lock-date`	Date Picker (`YYYY-MM-DD`)	Earliest open transaction date; transactions on or before this date are frozen.
Save & Continue	`#wiz-btn-step1-save`	Primary Button	Persists company profile via `POST /onboarding/step1` and unlocks Step 2.

> 📌 **Important**
>
> The **Cutover Date** represents the boundary between your historical financial records and active ERP operations. For example, if your cutover date is `2026-08-31` , all opening balance sheet figures, unpaid invoices, and open bills must be dated `2026-08-31` . Live daily operations begin on `2026-09-01` .

16.3 Step 2: Chart of Accounts & Opening Balance Commit

Step 2 provisions the master General Ledger taxonomy and establishes starting debit and credit balances for all asset, liability, equity, revenue, and expense accounts.



CSV File Specification (Chart of Accounts)

The accounts ingestion engine requires a standard 5-column CSV format. Users can click **Download Template** (`#btn-download-tpl-accounts`) to obtain a prepopulated sample file:

```
code,name,type,opening_balance,balance_type
1000,Operating Checking,Asset,145250.00,debit
1100,Accounts Receivable,Asset,34250.00,debit
1500,Field Vibration Sensors,Asset,48000.00,debit
2000,Accounts Payable,Liability,18400.00,credit
2150,Payroll Clearing / Accrued Commissions,Liability,0.00,credit
3000,Owner Equity,Equity,185000.00,credit
3200,Opening Balance Equity,Equity,0.00,credit
3910,Migration Suspense,Equity,0.00,credit
4000,Service Revenue,Revenue,0.00,credit
5000,Cost of Goods Sold,Expense,0.00,debit
6050,Sales Commission Expense,Expense,0.00,debit
```

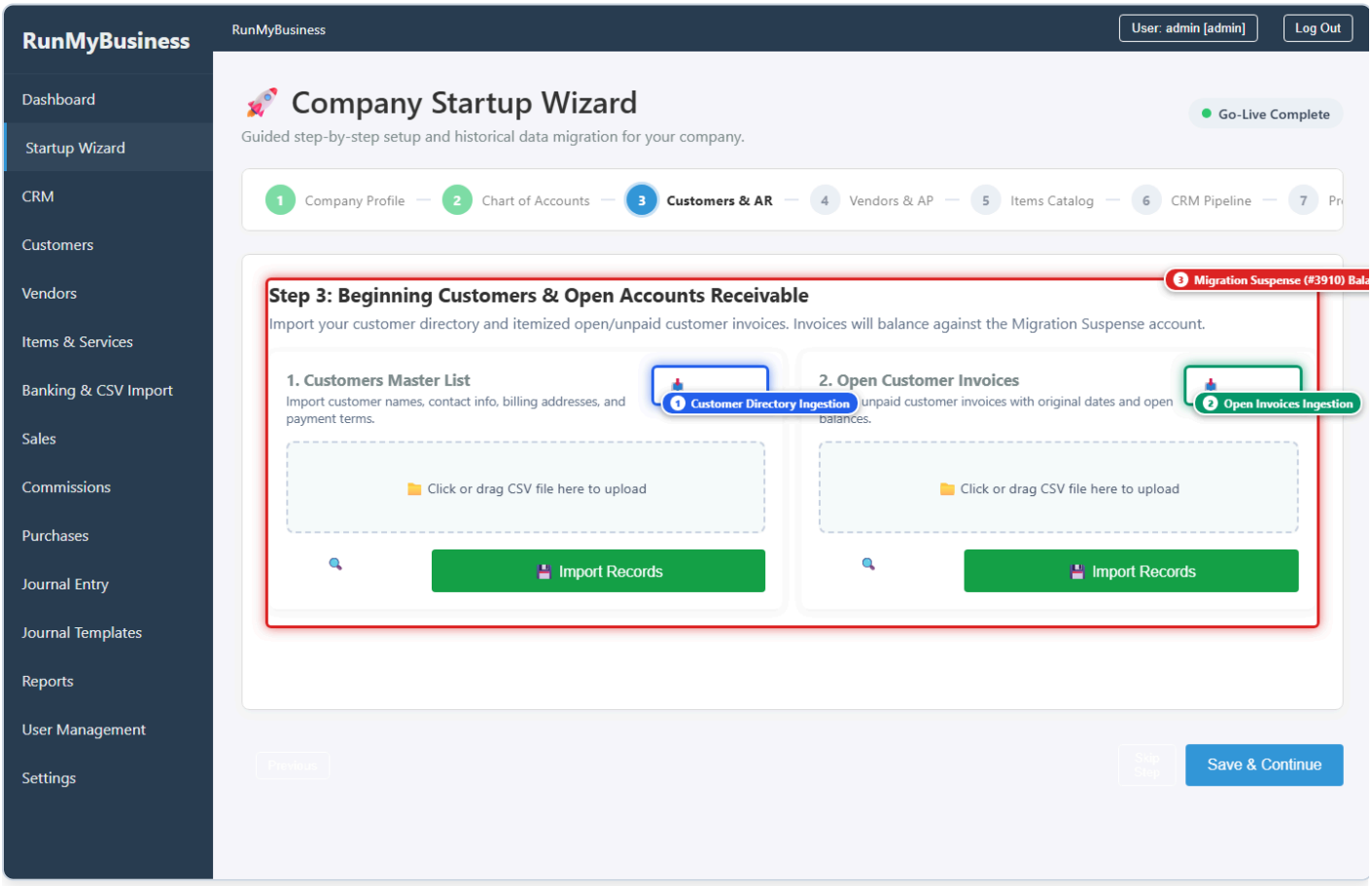
Two-Stage Ingestion Workflow

1. **Pre-Commit Validation** (`#btn-validate-accounts`):
2. Inspects all rows for unique numeric codes and valid standard types (`Asset` , `Liability` , `Equity` , `Revenue` , `Expense`).

3. Verifies that normal balance classifications align (`debit` for Assets/Expenses; `credit` for Liabilities/Equity/Revenue).
4. Displays an inline dry-run verification card reporting total debits, total credits, and net variance.
5. **Atomic Commit & Equity Offset** (`#btn-commit-accounts`):
6. Creates or updates account master records in `accounts` .
7. Automatically generates an opening journal entry dated on the cutover date.
8. If total debits exceed credits (or vice-versa), the balancing residual is posted to `#3200 Opening Balance Equity` , guaranteeing that `Total Debits == Total Credits` to the exact cent.

16.4 Steps 3 & 4: Subledger Ingestion & Migration Suspense Neutrality

A recurring failure point in standard ERP implementations is the duplication of receivables and payables during historical cutover. RMB solves this through its **Migration Suspense Neutrality Architecture**.



The Subledger Neutrality Invariant

In Step 2, the General Ledger received top-level opening balances: * `#1100 Accounts Receivable` : Debit `$34,250.00` * `#2000 Accounts Payable` : Credit `$18,400.00`

If the accountant were to enter the individual open customer invoices into a standard invoicing screen, the software would record: * `Debit: #1100 Accounts Receivable` * `Credit: #4000 Service Revenue`

This would double Accounts Receivable to `$68,500.00` and improperly recognize prior-period revenue!

To maintain absolute accounting integrity: 1. **Step 3 (Open Invoices)** offsets historical receivables against **`#3910 Migration Suspense`**: * **Debit**: `#1100 Accounts Receivable` (`$34,250.00`) * **Credit**: `#3910 Migration Suspense` (`$34,250.00`) 2. **Step 4 (Open Bills)** offsets historical payables against **`#3910 Migration Suspense`**: * **Debit**: `#3910 Migration Suspense` (`$18,400.00`) * **Credit**: `#2000 Accounts Payable` (`$18,400.00`) 3. The net balance in `#3910 Migration Suspense` reconciles against the initial opening balance journal, returning `#3910` to **exactly** **`$0.00`** while creating fully itemized customer invoices and vendor bills ready for operational tracking, aging, and payment collection.

Interactive Controls Reference (Steps 3 & 4)

Step	UI Control Label	HTML Element ID	Action / Purpose
Step 3	**Download Customers Template**	`#btn-download-tpl-customers`	Downloads `customers_template.csv` (`name,email,phone,address,payment_terms`).
Step 3	**Customer File Selector**	`#file-customers`	Upload input for customer directory CSV.
Step 3	**Upload Customers**	`#btn-upload-customers`	Ingests customer master records.
Step 3	**Download Open Invoices Template**	`#btn-download-tpl-open_invoices`	Downloads `open_invoices_template.csv` (`customer_name,invoice_number,issue_date,due_date,total_amount,description`).
Step 3	**Open Invoices File Selector**	`#file-open_invoices`	Upload input for open receivables CSV.
Step 3	**Upload Open Invoices**	`#btn-upload-open_invoices`	Provisions itemized open customer invoices with `#3910` offset.
Step 3	**Next: Vendors & AP**	`#wiz-btn-step3-next`	Advances to Step 4.
Step 4	**Download Vendors Template**	`#btn-download-tpl-vendors`	Downloads `vendors_template.csv` (`name,email,phone,address,payment_terms`).
Step 4	**Vendor File Selector**	`#file-vendors`	Upload input for approved vendor roster CSV.
Step 4	**Upload Vendors**	`#btn-upload-vendors`	Ingests vendor master records.
Step 4	**Download Open Bills Template**	`#btn-download-tpl-open_bills`	Downloads `open_bills_template.csv` (`vendor_name,bill_number,bill_date,due_date,total_amount,description`).
Step 4	**Open Bills File Selector**	`#file-open_bills`	Upload input for open payables CSV.

Step	UI Control Label	HTML Element ID	Action / Purpose
Step 4	**Upload Open Bills**	`#btn-upload-open_bills`	Provisions itemized open vendor bills with `#3910` offset.
Step 4	**Next: Items & Services**	`#wiz-btn-step4-next`	Advances to Step 5.

16.5 Step 5: Master Items & Services Catalog

Step 5 provisions the catalog of sellable service offerings, hardware sensors, and recurring maintenance retainers.

CSV File Specification (Items & Services)

Click **Download Template** (`#btn-download-tpl-items`) to obtain `items_template.csv` :

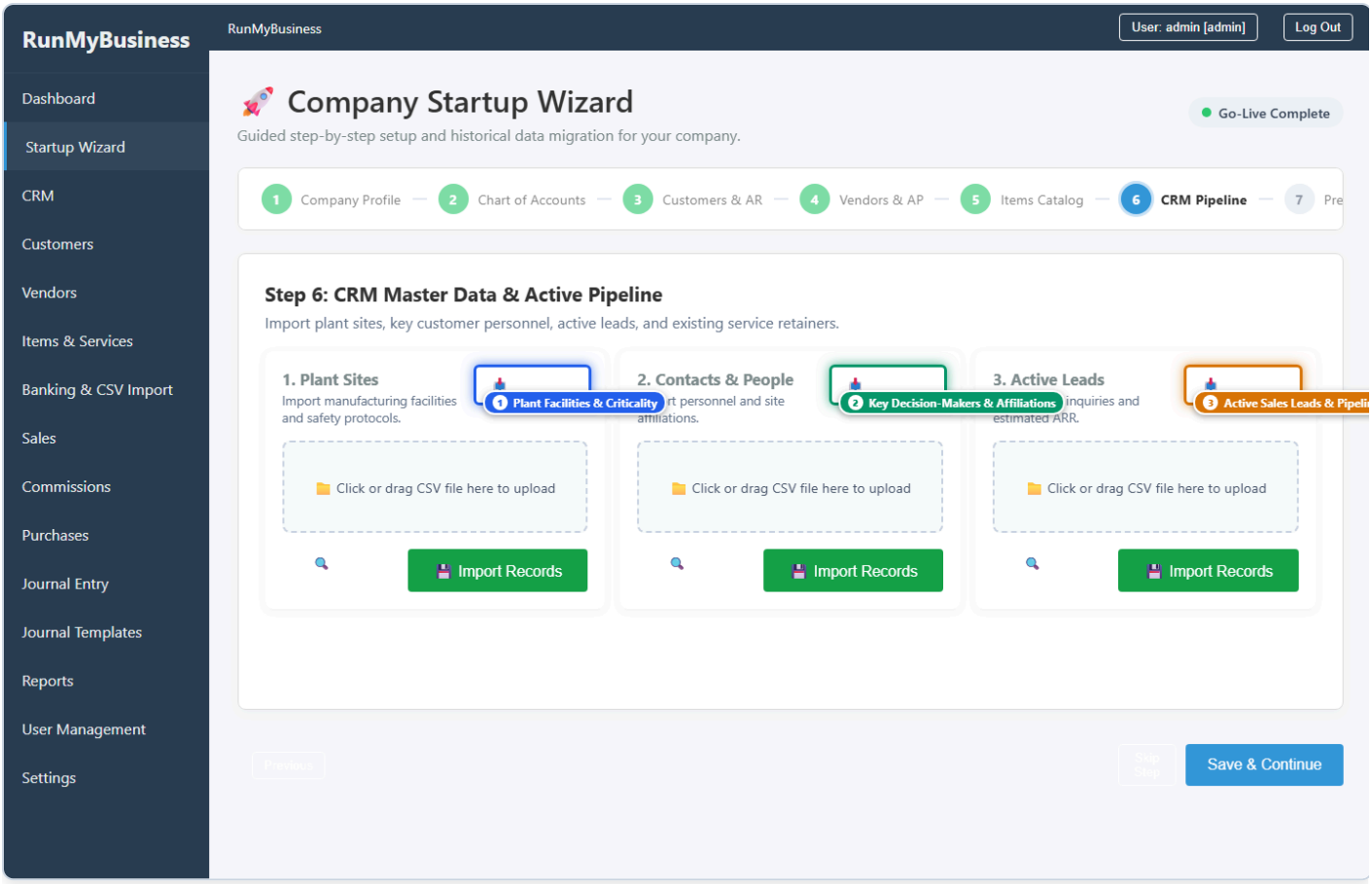
```
code,name,type,unit_price,cost_price,income_account_code,expense_account_code,commission_category
VIBE-SRV-01,Monthly Predictive Vibration Analysis,Service,2500.00,0.00,4000,,Service
SNS-WIRELESS-04,Triaxial Wireless Accelerometer Node,Product,450.00,185.00,4000,5000,Hardware
ENG-DISPATCH-HR,Senior Reliability Engineer On-Site Rate,Service,175.00,0.00,4000,,Service
EXP-PASSTHRU,Travel & Lodging Direct Pass-Through,Service,1.00,1.00,4000,5000,Noncommissionable
```

Key Fields & Automation

- **`commission_category`** : Automatically tags invoice line items as `Hardware` , `Service` , or `Noncommissionable` . When invoices are generated, the commissions engine reads this classification to calculate split earnings for assigned sales reps without requiring manual categorization.
- **Account Linking**: Connects product sales and service fees to designated general ledger revenue accounts (`income_account_code`) and inventory costs to cost-of-goods-sold accounts (`expense_account_code`).

16.6 Step 6: CRM Master Data Pipeline Ingestion

Step 6 imports the industrial commercial hierarchy: multi-site manufacturing plants, plant engineers and corporate procurement contacts, and active sales pipeline opportunities.

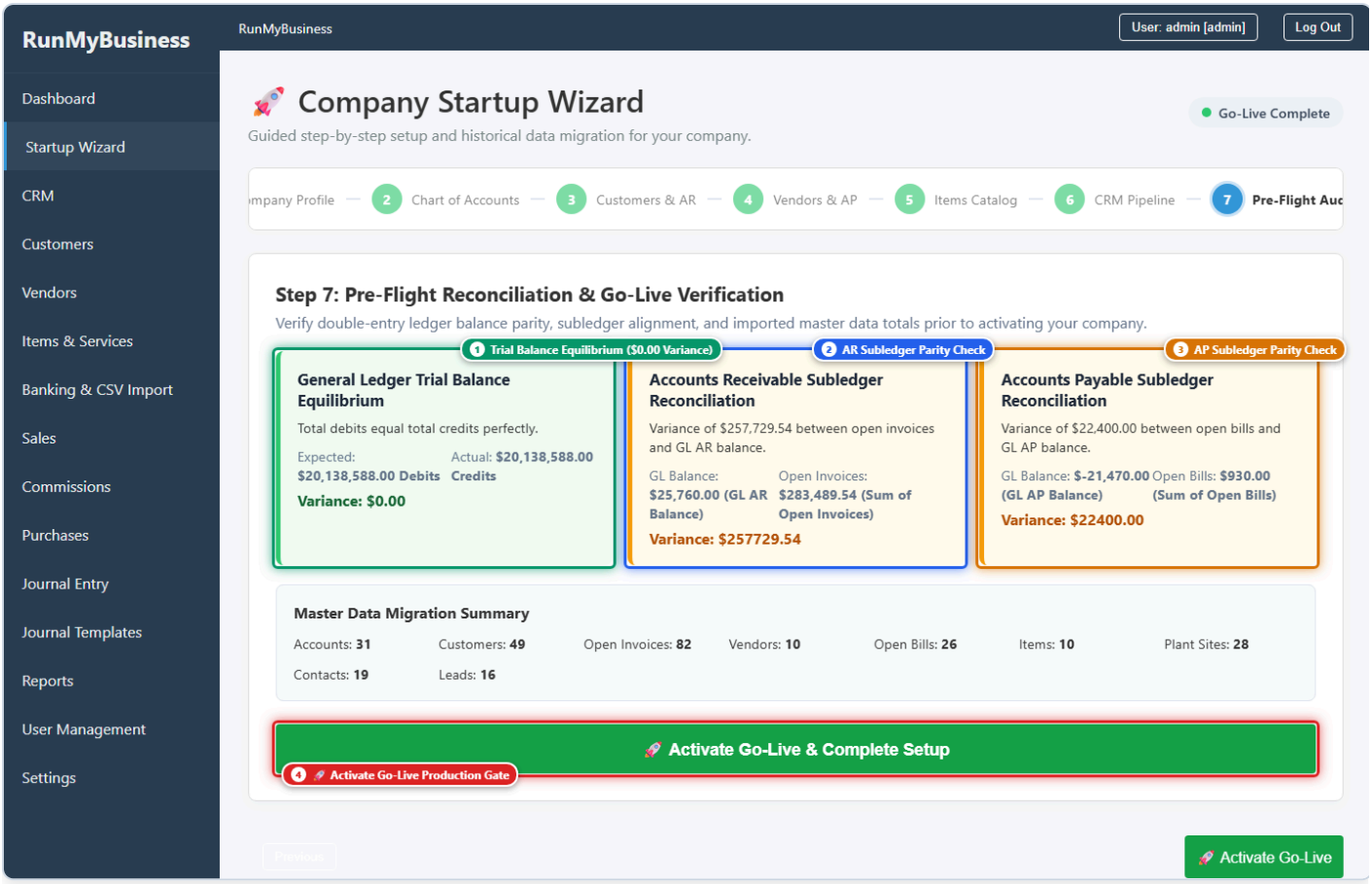


Three-Tier CRM Ingestion Sequence

1. **Plant Facilities & Operating Sites** (`#btn-upload-crm_sites`):
2. Ingests physical factory sites (`Plant/Site`) linked to parent corporate accounts.
3. Captures facility addresses, operating criticality tiers (Tier 1 Critical, Tier 2 Essential, Tier 3 Balance of Plant), and environmental risk ratings.
4. **Key Decision-Makers & Affiliations** (`#btn-upload-crm_contacts`):
5. Ingests contacts and verifies emails against the master registry to prevent duplicates.
6. Provisions temporal affiliations (`CrmPersonAffiliation`) linking contacts to specific plant locations with their primary functional roles (Plant Manager, Maintenance Lead, Procurement Buyer).
7. **Active Pipeline Leads & Contracts** (`#btn-upload-crm_leads`):
8. Ingests active commercial opportunities with estimated ARR, target booking dates, assigned sales representatives, and lead stages.
9. Pre-provisions active service agreements and recurring monitoring retainers.

16.7 Step 7: Pre-Flight Audit & Go-Live Production Gate

The final step is the automated system integrity audit. Before any user can transition the company into live production, the engine executes real-time mathematical verifications across the database.



The 4 Automated Pre-Flight Integrity Audits

Audit Metric	HTML Element ID	Verification Rule	Passing Condition
Trial Balance Equilibrium	`#audit-card-trial-balance`	`Sum(Debits) - Sum(Credits)` across all accounts.	GL Variance is exactly `$0.00`.
AR Subledger Parity	`#audit-card-ar-subledger`	`Sum(Open Invoices) - Balance(Account #1100)`.	Subledger Variance is exactly `$0.00`.
AP Subledger Parity	`#audit-card-ap-subledger`	`Sum(Open Bills) - Balance(Account #2000)`.	Subledger Variance is exactly `$0.00`.
Migration Suspense Zero-Clear	`#audit-card-suspense`	`Balance(Account #3910 Migration Suspense)`.	Account balance is exactly `$0.00`.

Activating Production Go-Live

1. Click **Run Pre-Flight Audit** (`#btn-run-preflight-audit`). The system queries `GET /onboarding/preflight-audit` and renders the 4 status cards.
2. If any metric displays a discrepancy, an explanatory error banner details the exact cent discrepancy and directs the user to the offending step.
3. When all 4 cards display green checkmark badges, the 🚀 **Activate Go-Live** button (`#btn-activate-go-live`) enables.

4. Click **Activate Go-Live** (`#btn-activate-go-live`):
5. A custom HTML modal opens requesting final confirmation.
6. Click **Confirm Go-Live Activation**.
7. The backend `POST /onboarding/activate-go-live` transitions company status to `active` , seals all migration records, permanently enforces the historical transaction lock date, and redirects the administrator to the Executive Dashboard.

---

17. Troubleshooting & Frequently Asked Questions (FAQ)

Q1: Why did the system reject my invoice or journal entry with a "Transaction falls within locked period" error?

A: An administrator or controller closed the prior accounting period and set a **Transaction Lock Date** (`#company-lock-date`). Any financial transaction dated on or before that date is blocked from creation, editing, or deletion. To post the transaction, update the transaction date to an open period or request an administrator adjust the lock date.

Q2: Why is my sales invoice commission listed as "Pending" instead of "Eligible"?

A: Under RMB accounting rules, commissions become **Eligible** only when an individual invoice is **100% paid** ($0.00 open balance). Partial customer payments do not unlock partial commissions. Once the remaining balance is collected, the commission record automatically transitions to Eligible.

Q3: How do we prevent duplicate commission expenses when paying sales reps through ADP Payroll?

A: When recording an approved payout batch under the `Payroll (ADP)` channel, the system posts: * **Debit**: `#6050 Sales Commission Expense` * **Credit**: `#2150 Payroll Clearing / Accrued Commissions` When ADP withdraws the gross payroll lump sum from your operating checking account, categorize the commission portion of the bank debit to `#2150 Payroll Clearing` . This debits `#2150` back to $0.00 and credits `#1000 Operating Cash` , completely preventing duplicate expenses.

Q4: What happens if an approved commission payout batch needs an adjustment?

A: Once approved by the Business Owner, a payout batch is completely immutable. If an adjustment is necessary, an authorized manager must click **Return to Draft**, enter a mandatory justification reason, modify the batch items, and resubmit for formal approval.

Q5: How do Named Account rules interact with standard salesperson plans?

A: RMB follows a strict 3-tier precedence hierarchy: 1. **Tier 1 (Highest)**: Customer Named Account Rule (e.g., Omar on Novolex: 2.5% Service, 3.75% Hardware, 0.5% Renewal). 2. **Tier 2**: Salesperson Assigned Plan (e.g., Carlos Plan: flat 5.0% across all categories). 3. **Tier 3 (Baseline)**: Global Company Plan (5.0% Service, 7.5% Hardware, 1.0% Renewal).

Q6: Can a sales representative view financial reports or other reps' earnings?

A: No. Role-Based Access Control strictly isolates sales representatives (`salesperson`). Reps can only view their assigned accounts, contacts, leads, quotes, and personal commission dashboard. General ledger journals, banking feeds, profit & loss statements, and peer compensation are strictly hidden.

Q7: How does the system handle contacts who transition between different industrial plant sites?

A: Contacts are strictly deduplicated by email address (`CrmPerson`). Instead of creating duplicate records, contacts maintain temporal affiliations (`CrmPersonAffiliation`) with multiple accounts over time. When a maintenance engineer moves from Plant A to Plant B, add a new affiliation while marking the previous affiliation inactive. All historical quote deliveries, communications, and meeting notes remain preserved without data fragmentation.

Q8: What is the 80% Baseline Suspension Rule and how is it billed?

A: When an industrial client requests a temporary operational pause (e.g. annual turnaround outages or maintenance overhauls), the service term is placed in `Suspended` status. Under RMB commercial agreements, billing continues automatically at an **80% baseline rate** (e.g., $10,000/mo drops to $8,000/mo) to preserve dedicated engineering staff and sensor hardware allocations. Resumption returns billing to 100% active status.

Q9: What happens when the 14-day verbal commitment clock expires without a customer PO?

A: When a deal is marked `Verbal Approval` , a 14-calendar-day countdown clock starts. If day 14 is reached without linking a customer Purchase Order, the opportunity is automatically flagged as an urgent red exception across the rep's **Work Queue** (Card 5) and the **Manager Dashboard**. The rep must either obtain the PO or document an authorized deadline extension.

Q10: How does the 5% PO matching tolerance work during deal booking?

A: When matching a customer purchase order against a quoted proposal: * If the PO total is within **+/- 5.0%** of the quoted total contract value, the system auto-confirms booking, bridges ERP accounts, provisions recurring service terms, and locks salesperson commission rates. * If the variance exceeds 5.0%, the booking is blocked and routed to the **PO Discrepancies** review queue for formal variance resolution.

Q11: What triggers an operations handoff SLA breach?

A: When a deal is booked, an operations handoff record is generated in status `Handoff Required` . The sales representative must complete the mandatory 5-point checklist (safety, site access, plant contacts, scope, asset list). Once submitted, the Operations Director has **5 business days** to inspect and accept the package. If unreviewed after 5 business days, the deal is flagged with a high-priority red SLA breach banner across the Executive Dashboard.

Q12: Why is the "Activate Go-Live" button disabled in Step 7 of the Startup Wizard?

A: The **Activate Go-Live** button (`#btn-activate-go-live`) is programmatically locked until all 4 automated pre-flight integrity audits pass with a $0.00 variance. If the button is disabled, click **Run Pre-Flight Audit** (`#btn-run-preflight-audit`) and examine the red discrepancy cards: * If **Trial Balance Equilibrium** fails: your uploaded Chart of Accounts has unequal debits and credits. Recheck Step 2. * If **AR Subledger Parity** fails: the sum of uploaded open invoices does not match Account `#1100 Accounts Receivable` . * If **AP Subledger Parity** fails: the sum of uploaded open bills does not

match Account `#2000 Accounts Payable`. * If **Migration Suspense Zero-Clear** fails: Account `#3910 Migration Suspense` has not netted to $0.00.

Q13: What is Account #3910 Migration Suspense and why must it reach a $0.00 balance?

A: Account `#3910 Migration Suspense` is a temporary equity clearing account used during historical data cutover. It prevents the double-counting of revenues and expenses when itemized customer invoices and vendor bills are imported to establish operational subledgers. When open invoices and bills are fully matched against the master opening balances entered in Step 2, the suspense account automatically balances to exactly `$0.00`. A non-zero balance indicates that itemized subledgers do not match the trial balance.

Q14: Can I re-run the Startup Wizard after my company has gone live?

A: Once production Go-Live is activated, the company status changes to `active` and historical cutover records are locked. To prevent accidental disruption to live accounting ledgers, the wizard steps become read-only. Ongoing imports (e.g. new customer lists, contacts, or service terms) should be performed using the dedicated CSV Importers under **CRM** > **CSV Importers** (`#tab-crm-importers`).

Q15: How does the Startup Wizard prevent duplicate accounts, customers, or vendors during repeated CSV uploads?

A: Ingestion endpoints utilize upsert matching logic: * **Accounts**: Matched on unique `code`. Uploading an account with an existing code updates its name, type, and opening balance rather than creating a duplicate. * **Customers & Vendors**: Matched on exact company `name`. * **CRM Contacts**: Matched on unique lowercase `email`. If an email already exists in the master directory, the importer updates the contact's phone and title and creates a new facility affiliation without duplicating the individual.

Q16: How do I save my customized column layout and widths across different computers?

A: RMB features automatic dual-layer persistence. Whenever you reorder columns, resize column widths, toggle column visibility, or change your sort preferences, the settings are instantly stored in your browser's local cache and automatically synced to your user profile on the server (`/api/user-preferences/{key}`). When you log in from a different computer or browser, your personalized column layouts and widths load automatically.

Q17: Why can't I perform bulk status changes or batch deletions on Sales Invoices or Purchase Bills?

A: To protect accounting compliance, audit trails, and General Ledger equilibrium, the system enforces a strict **Financial Immutability Rule**. Bulk mutation operations (such as batch status changes, bulk assignments, or batch deletions) are strictly restricted to non-financial CRM entities (Accounts, Leads, Activities). On financial tables (Sales Invoices, Purchase Bills, Bank Feeds, Manual Journals), only **Bulk CSV Export** is permitted, ensuring that every financial write or status update requires explicit individual validation.

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18. Advanced List Views, Column Customization & Data Export

18.1 Overview of the Enterprise Data Grid (`RmbGrid`)

Every primary entity list across RunMyBusiness—encompassing 15 major ERP accounting tables and CRM management views—is powered by the unified `RmbGrid` engine. This engine delivers desktop-class performance, deep personalization, and accessible keyboard navigation without cumbersome third-party software dependencies.

Covered Entity Tables:

- **ERP Accounting**: Sales Invoices (`#sales-table`), Purchase Bills (`#purchases-table`), Customers (`#customers-table`), Vendors (`#vendors-table`), Banking Feed (`#banking-table`), Items & Services Catalog (`#items-table`), Chart of Accounts (`#accounts-table`).
- **CRM Commercial**: Accounts Directory (`#crm-accounts-table`), Contacts & Affiliations (`#crm-people-table`), Sales Leads (`#crm-leads-table`), Activity Tasks (`#crm-activities-table`), Quotes (`#crm-quotes-table`), Service Terms & Retainers (`#crm-terms-table`), Operations Handoffs (`#crm-handoffs-table`).

18.2 Column Customization: Chooser, Reordering & Resizing

1. Column Chooser & Visibility

Each table includes a **Columns** dropdown button on the top-right toolbar. * Click **Columns** to reveal the full catalog of available fields for that entity. * Check or uncheck column names to immediately show or hide them from view. * Click **Reset to Default** at the bottom of the dropdown to instantly restore the factory layout.

2. Drag-and-Drop Column Reordering

- Click and hold any table column header cell.
- Drag the header left or right to the desired position.
- A vertical blue drop indicator displays the destination slot.
- Release the mouse button to drop the column in its new position. All underlying data cells realign instantaneously.

3. Draggable Column Width Resizing

- Move your mouse pointer over the dividing border between two column headers.
- The cursor changes to a horizontal resize indicator (`col-resize`).
- Click and drag left or right to expand or contract the column width.
- Column widths are constrained between **80 pixels** (minimum readability) and **500 pixels** (maximum boundary).
- Text that exceeds the column width is cleanly truncated with an ellipsis (`...`). Hover your mouse pointer over any truncated cell to display a native browser tooltip revealing the complete underlying text or number.

18.3 Multi-Column Typed Sorting

Clicking any column header activates intelligent, type-aware sorting: * **Cycle Sequence**: 1. First click: **Ascending** (`▲` indicator appears). 2. Second click: **Descending** (`▼` indicator appears). 3. Third click: **Natural / Unsorted** (restores default chronological ordering). * **Data-Type Awareness**: * **Currency & Balances**: Automatically strips currency symbols (`$` , `,`) and evaluates mathematical numeric value. * **Dates**: Compares standard ISO (`YYYY-MM-DD`) and formatted timestamps chronologically. * **Strings**: Performs case-insensitive, localized alphabetical sorting. * **Statuses**: Groups workflow stages logically (e.g. `Draft` -> `Sent` -> `Won` / `Paid`). * **Secondary Key Stability**: When multiple rows share identical sort values (e.g., three invoices dated the same day), the grid preserves a secondary tie-breaker based on record ID, preventing unpredictable row jumping.

18.4 Real-Time Search, Filtering & Active Filter Chips

- **Debounced Instant Search**: Type any customer name, invoice number, part code, or city into the search box. Results filter smoothly in real time across all visible text columns.
- **Quick Filters**: Entity-specific dropdown filters (e.g., Status: *Open*, *Paid*, *Overdue*) allow immediate filtering of active views.
- **Active Filter Chips**: Whenever filters or search criteria are applied, visual blue tags render below the search bar showing each active filter.
- **One-Click Clear**: Click the `×` on any individual tag to remove that specific filter, or click the **Clear All** button to immediately reset the entire view to show all records.

18.5 Dual-Layer Preference Persistence (Local & Roaming)

RMB separates layout personalization from temporary operational filters using a dual-layer split architecture: 1. **Permanent Layout Settings**: * What columns you display, their custom widths, their left-to-right sequence, and your preferred sort direction are saved permanently. * Settings are cached instantly in your local browser storage (`localStorage`) and simultaneously synchronized in the background to the central database (`PUT /api/user-preferences/{key}`). * When you log in from a mobile tablet, laptop, or new workstation, your personalized column layouts load seamlessly. 2. **Sticky Session Filters**: * Search terms and filter chips are preserved while you navigate between tabs and views during your active working session. * If filters are currently active, a prominent badge reminds you that results are narrowed. * When you sign out and log back in, temporary search filters automatically reset to clean defaults, ensuring you never miss records due to forgotten prior queries.

18.6 Enterprise CSV Data Export & Formula Injection Protection

To export records for external analysis, reporting, or client audits, click the **Export CSV** button located on the toolbar.

Export Modal Options:

- **Current View (Visible Columns)**: Exports a clean CSV containing only the columns currently displayed on your screen, filtered exactly according to your active search terms.

- **All Columns (Full Dataset)**: Generates a complete data dump containing every raw database field for the matching records, ideal for complete historical backups and migrations.

Automatic Formula Sanitization (CWE-1236 Prevention):

Exporting untrusted business data into spreadsheets carries security risks if customer names or descriptions contain formula triggers. The RMB Export Engine automatically scans every exported cell value: * If a cell begins with `=`, `+`, `-`, or `@`, the engine automatically prefixes it with a single apostrophe (`'`). * This ensures that when the file is opened in Microsoft Excel or Google Sheets, the spreadsheet treats the content strictly as inert text rather than executing arbitrary formulas or external data queries.

Role-Based Export Security:

Users assigned exclusively to the `salesperson` role can export CRM lists (Accounts, Contacts, Leads, Quotes) but are strictly prohibited from exporting General Ledger records, Sales Invoices, Purchase Bills, or Bank Reconciliation statements (returning `HTTP 403 Forbidden`).

18.7 Conservative CRM Bulk Actions

For high-volume operational workflows, the `RmbGrid` engine supports batch operations on non-financial CRM entities: * **Eligible CRM Views**: * **Accounts**: Bulk reassign account ownership across plant facilities to a new sales representative. * **Leads**: Batch transition qualified leads to a new pipeline stage. * **Activities**: Batch mark outstanding sales call or meeting tasks as completed. * **Two-Tier Selection Banner**: * Clicking the header checkbox selects all records currently visible on the active page (e.g., "*25 records selected on this page*"). * A secondary action banner appears above the table offering: "*Select all [N] matching records across all pages*", allowing actions across large multi-page datasets without tedious page-by-page clicking. * **Financial Protection Guardrail**: * Bulk modification is strictly disabled on all accounting tables (Sales Invoices, Purchase Bills, Bank Transactions, Journal Entries). Financial transactions must always be created, approved, and adjusted individually to safeguard General Ledger trial balance equilibrium ($0.00 variance) and audit compliance.