

Haimoura Carwash POS & Management System

Official Exhaustive User & Administrator Manual — Versions 4.0.4 (Single-Site) & 5.0.0 (Multi-Branch Ecosystem)

1. System Introduction & Overview

The **Haimoura Carwash POS & Management System** is a high-speed, offline-resilient point of sale and enterprise management solution designed specifically for car washes, detailing centers, and automotive cleaning facilities. Built for rapid customer checkout and rigorous financial reconciliation, it operates in two editions:

Specification	Version 4.0.4 Single-Site	Version 5.0.0 Multi-Branch Ecosystem
Target Operational Scale	Single carwash shop or detailing center	2 to 10+ branch locations with central HQ
Deployment Architecture	Standalone local installation (XAMPP / Linux / cPanel)	Edge-to-Cloud Hub & Spoke (Shop Client + HQ Report Farm)
Internet Dependency	100% Offline (Zero internet connection required)	100% Offline POS at shop; automatic 5-minute background sync when online
Data Synchronization	Local MySQL database only	Bidirectional JSON push/pull sync via <code>CARWASH_HQ_URLBASE</code>
Licensing Policy	1 License = 1 Shop Location (Per-Branch)	1 License = 1 Shop Location (Per-Branch)

Design Philosophy for Single-Site Users:

Chapters 1 through 10 of this manual cover 100% of the features used in your carwash location (adding customers, cars, services, checkout, loyalty, payroll, and reports). **Chapter 11** at the end of this manual is dedicated exclusively to the Central Cloud HQ Control Tower for multi-branch organizations. Single-site users can focus entirely on Chapters 1–10.

2. System Setup & Installation Wizard

Installing the system on a local server, XAMPP, or web hosting panel requires running the one-time Installation Wizard (`public/install.php`). The wizard automates database creation, permission checking, branding, and administrator setup.

2.1 Pre-Flight Permission Checks

Before setup begins, the wizard verifies two mandatory filesystem requirements:

- `config/config.php` — Must be writable so the installer can store MySQL database credentials.
- `core/cache/.idx` — Must exist (or be created) and be writable so the Licensing SDK can store encrypted license tokens.

```
[ Carwash POS – System Installation Wizard] 1. Directory & File Permission
Checks config/config.php : [ Writable] /core/cache/.idx (Storage) : [ Present
& Writable]
```

Figure 2.1: Pre-flight permission verification screen in install.php.

2.2 Step-by-Step Installation Process

1. **MySQL Database Credentials:** Enter Database Host (default `127.0.0.1`), Database Name (e.g. `carwash_db`), Database Username, and Password. The wizard automatically connects via PDO, creates the database if it does not exist (`CREATE DATABASE IF NOT EXISTS`), and executes `db/schema.sql` and `db/schema-auth.sql` .
2. **Administrator (Owner) Account:** Enter an Admin Username (default `admin`) and a strong password (minimum 6 characters). The wizard hashes the password securely using PHP's `password_hash()` and assigns the `owner` role with 100% permissions.
3. **Custom Logo Upload:** Upload your carwash brand logo (PNG, JPG, WEBP). The installer validates the image and saves it to `public/views/logo.png` , immediately branding the navigation sidebar.
4. **License Token Activation (Optional):** Paste your Ed25519 License Token from the Haimoura License Server. You can activate immediately during installation or later in the Admin License screen.



OPERATIONS

POS (New Ticket)

Customers

Cars

Services

Accessories

B2B & RETENTION

Contracts

Contract Billing

Loyalty & Rewards

ADMIN & REPORTS

Reports

Operator Payroll

Users

License

Language:
English

Car Wash POS

Select Customer & Vehicle
Ahmed Al-Sayed - KRT-9821 (Medium)

Select Operator
No operator

Services (Car size: Medium)
Exterior Express Wash
12.00 EUR

Accessories (Car size: Medium)
Air Freshener
3.00 EUR

Selected Items

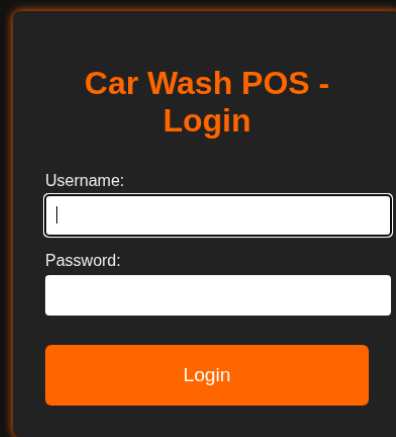
Item	Type	Base Price (EUR)	Discount (%)	Final Price (EUR)	Remove
Subtotal:				0.00 EUR	
Final Total:				0.00 EUR	

Payment Method:

Cash

Ref / Auth Code (Optional)

Create Ticket

The image shows a login screen for a 'Car Wash POS' system. The background is dark grey. In the center, there is a lighter grey rectangular box with an orange border. Inside this box, the title 'Car Wash POS - Login' is displayed in orange text. Below the title, there are two input fields: 'Username:' followed by a white text box containing a single vertical bar, and 'Password:' followed by an empty white text box. At the bottom of the box is an orange button with the text 'Login' in white.

**Car Wash POS -
Login**

Username:

Password:

Login

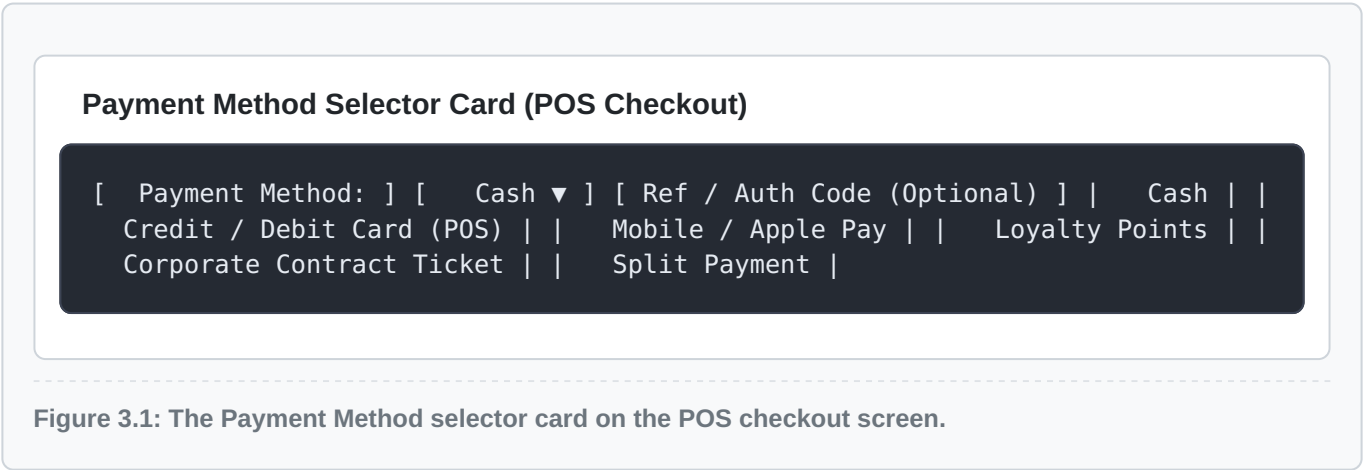
Figure 2.2: Clean Login Screen (no demo credentials displayed).

3. Daily Front-Desk Operations: Creating & Managing Wash Tickets

The Point of Sale screen (`?page=pos`) is the operational heart of the carwash. It is optimized for rapid walk-in checkout, automatic size-based pricing, and flexible payment tracking.

3.1 Step-by-Step Walk-In Checkout Flow

- Customer & Vehicle Search:** Type a customer name, phone number, or vehicle plate number in the search box. The fast AJAX search displays matching vehicles instantly. If the customer is new, click "+ **New Customer / Car**" to register them without leaving the POS.
- Vehicle Size Selection:** Selecting a vehicle automatically selects its registered size (`Small` , `Medium` , or `Large`). Size selection dynamically updates the base prices of all listed services and accessories.
- Operator Assignment:** Select the labor operator responsible for the wash from the Operator dropdown, or tag multiple workers if operating in Multi-Operator Split mode.
- Service & Accessory Selection:** Check the wash services (e.g., *Exterior Express Wash*, *Full Detailing*) and accessories (e.g., *Air Freshener*, *Tire Shine*). Custom discounts can be entered directly per item.
- Payment Method Selection:** Choose the customer's payment method from the Payment Card before submitting the ticket.



3.2 Payment Method Tracking & Thermal Receipt Printing

Every closed transaction records the chosen payment method (`cash` , `card` , `mobile` , `loyalty` , `contract` , or `split`) along with an optional Reference/Auth Code. When a ticket is closed and printed (`pos_ticket_preview.php`), the thermal receipt clearly displays the payment type for customer verification and end-of-day register reconciliation:

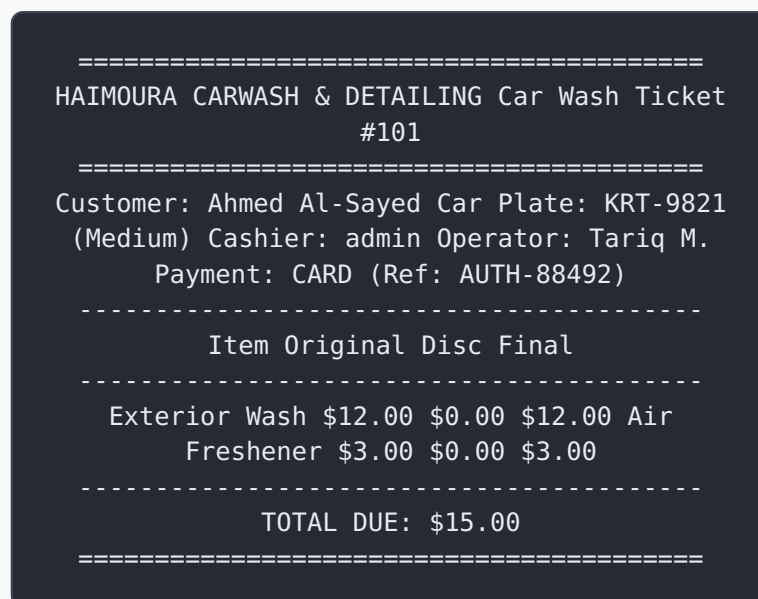


Figure 3.2: Printed thermal receipt displaying itemized pricing and payment method.

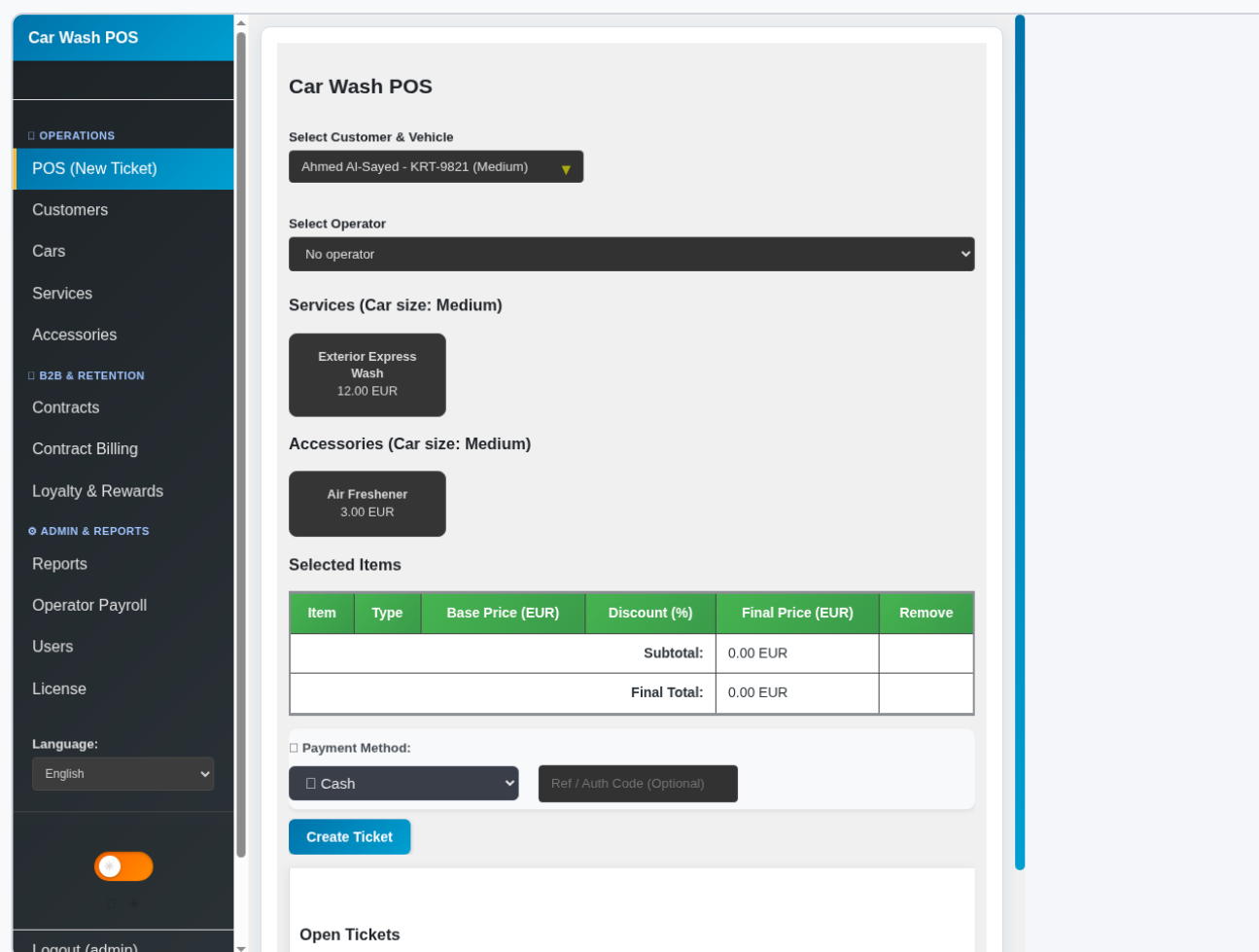


Figure 3.3: Point of Sale Checkout Screen with Payment Method selector card.

4. Customer & Vehicle Management

Managing regular customers and fleet vehicles is handled in the **Customers** ([?page=customers](#)) and **Cars** ([?page=cars](#)) screens.

4.1 Adding and Managing Customers

- **Create Customer Profile:** Enter the customer's Full Name (required), Phone Number (unique identifier), and Email Address.
- **Customer History:** Clicking a customer profile displays all vehicles registered to that account and their total lifetime wash tickets.

4.2 Registering Customer Vehicles

- **Plate Number & Size:** Every vehicle is linked to a customer and assigned a Plate Number (unique uppercase code) and a Vehicle Size ([Small](#) , [Medium](#) , or [Large](#)).
- **Why Size Matters:** The size classification controls automatic pricing rules across the POS menu. A *Small Sedan* pays the small price, while a *Large SUV* automatically triggers the large price.

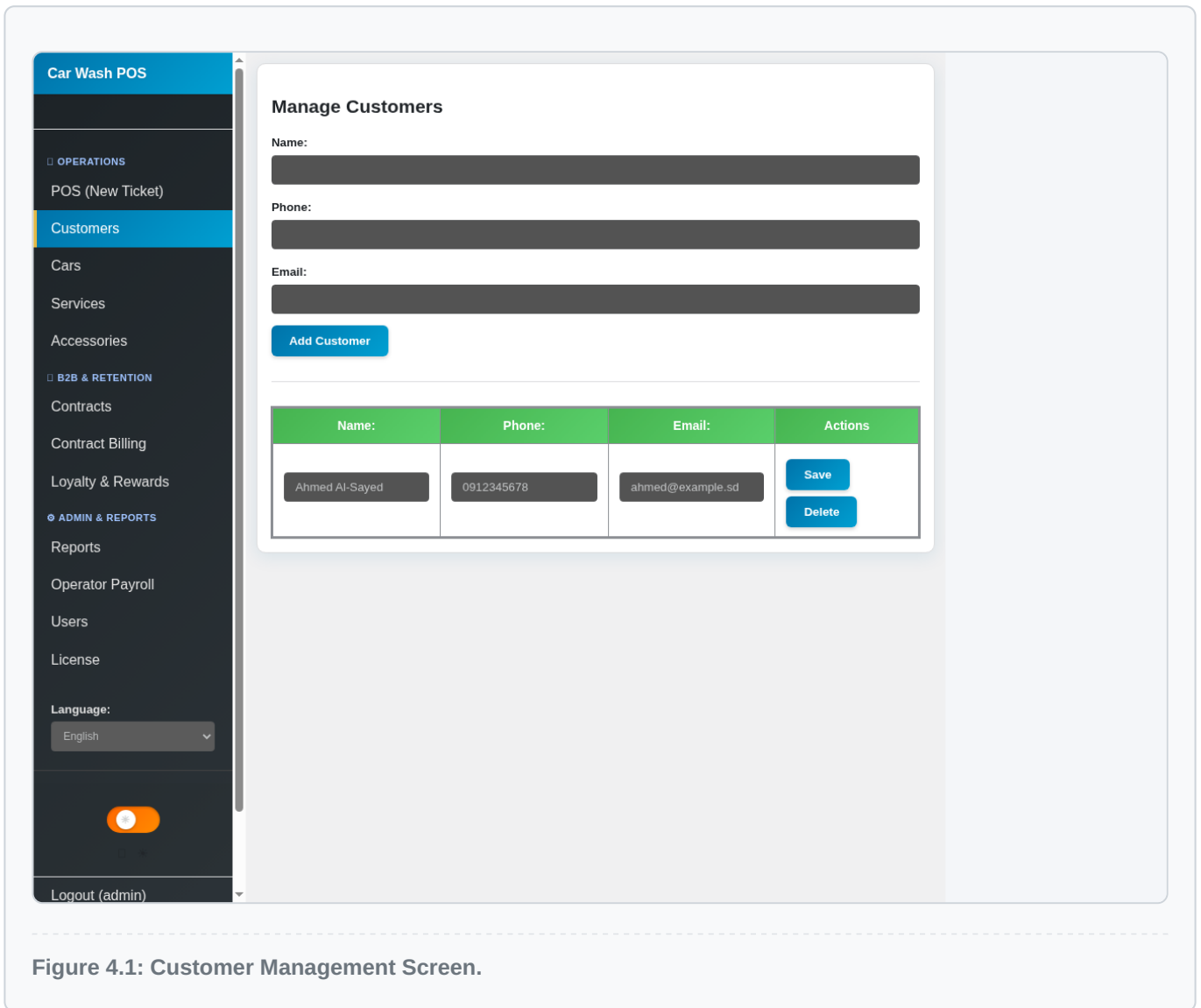
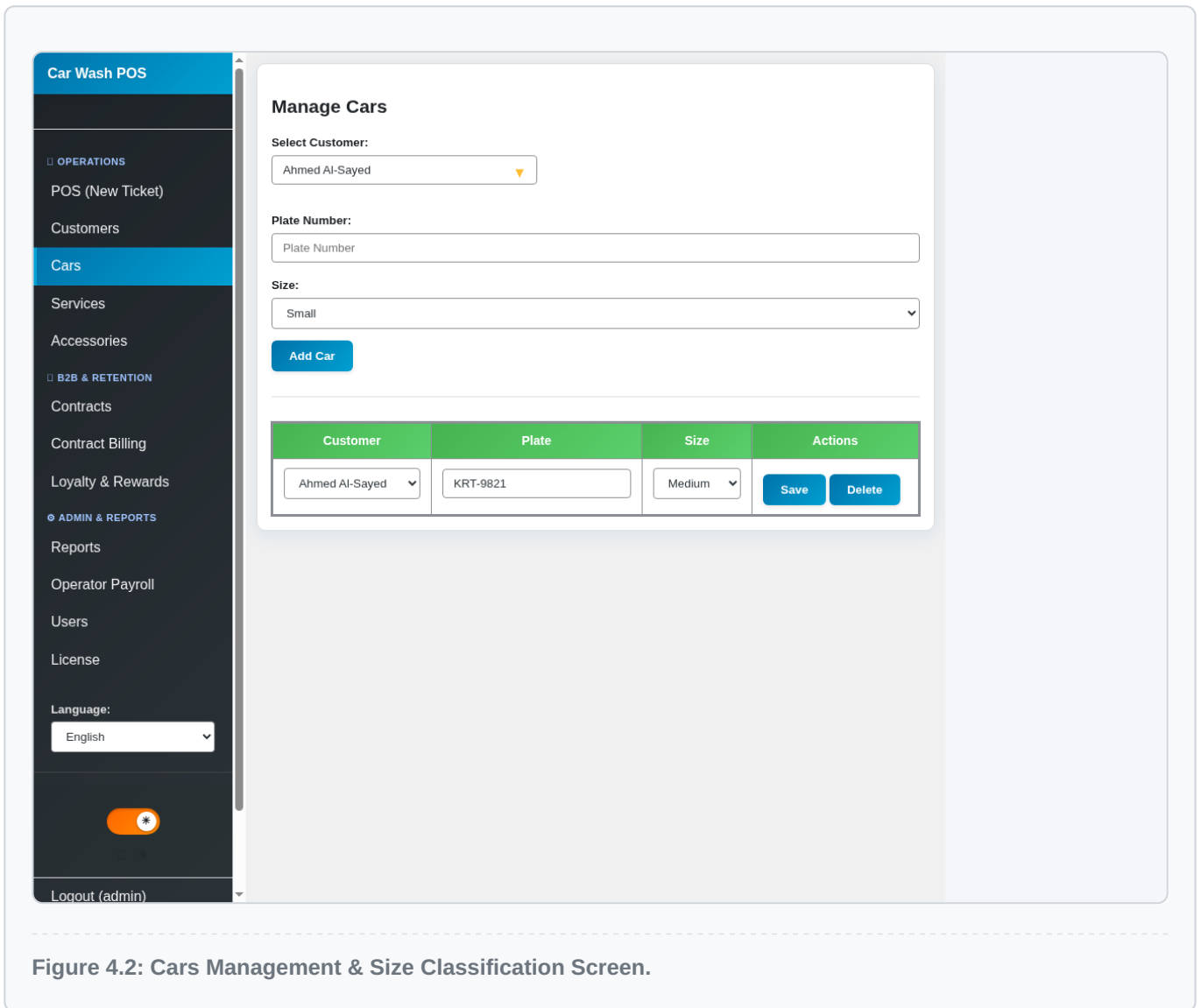


Figure 4.1: Customer Management Screen.



5. Services & Accessories Catalog

The Service Menu ([?page=services](#)) and Accessory Shop ([?page=accessories](#)) define what your carwash sells and how much each item costs across vehicle sizes.

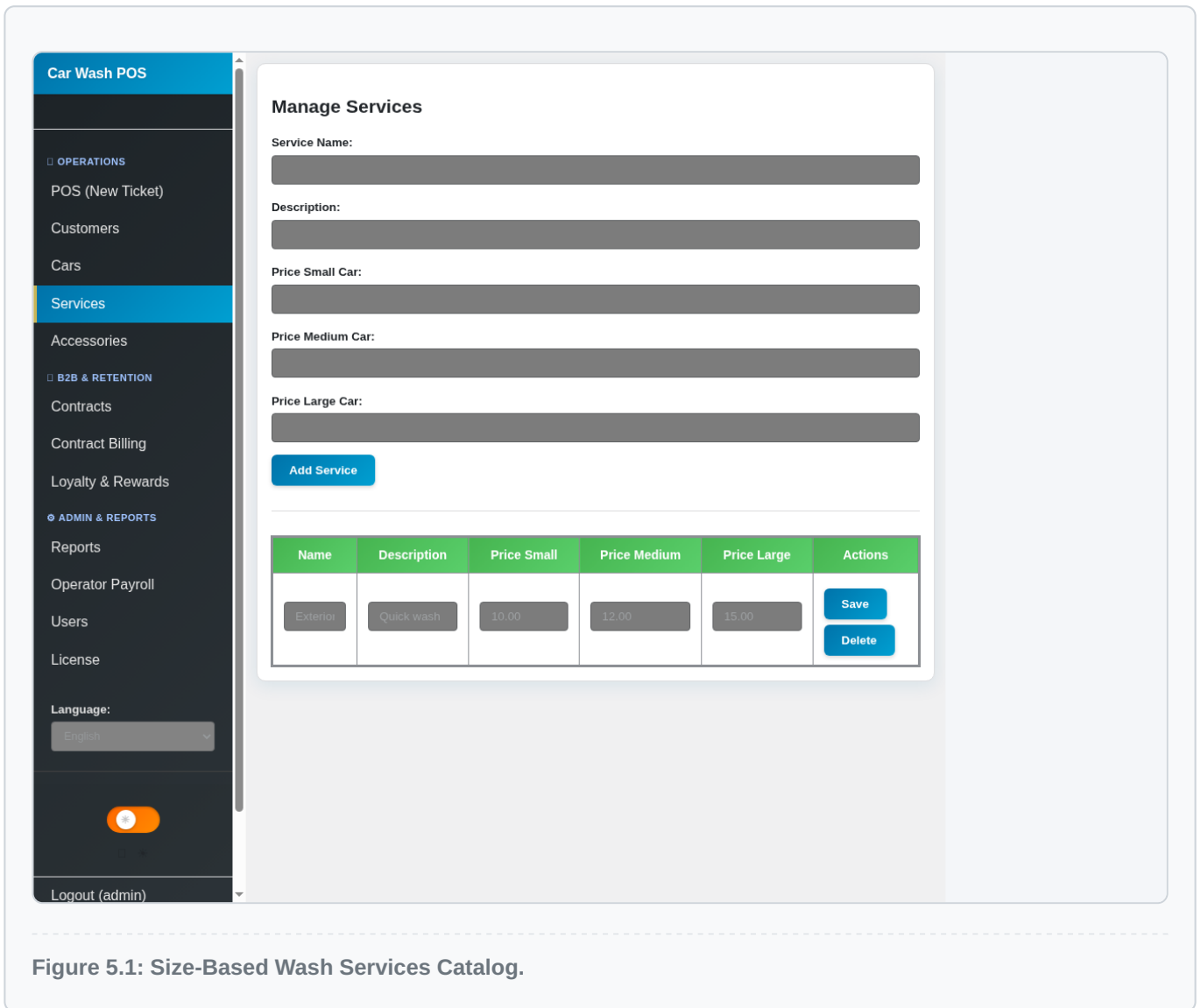
5.1 Defining Size-Based Wash Services

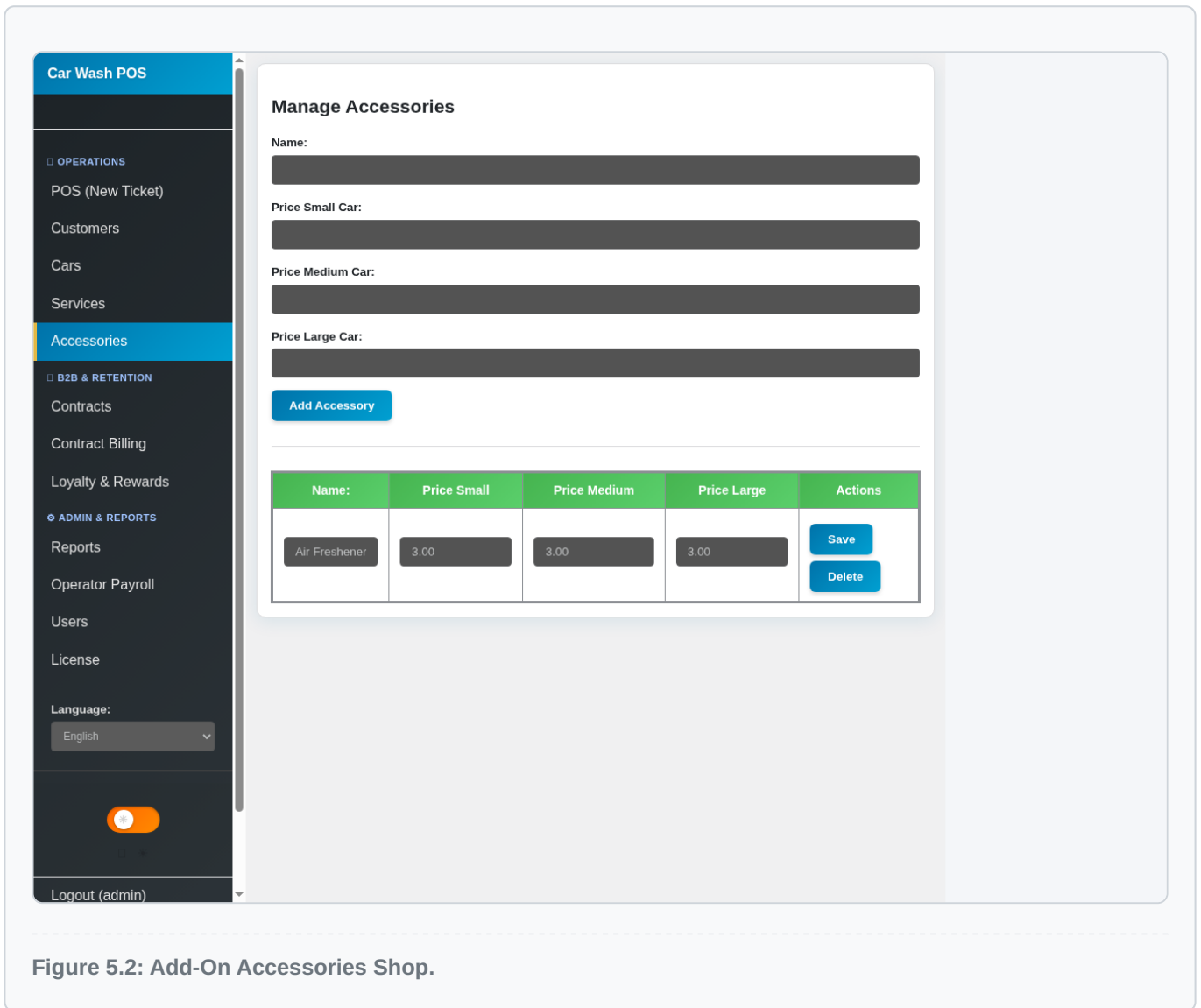
Each wash service item (e.g., *Exterior Wash*, *Full Interior Detailing*, *Undercarriage Wash*) is configured with three distinct base prices:

- **Base Price Small (\$)** — Price charged for compact cars and sedans.
- **Base Price Medium (\$)** — Price charged for mid-size crossovers and wagons.
- **Base Price Large (\$)** — Price charged for large SUVs, trucks, and vans.

5.2 Add-On Accessories

Accessories (e.g., *Microfiber Cloth*, *Dashboard Polish*, *Air Freshener*) follow the same three-tier pricing structure and can be added to any wash ticket with a single click.





6. B2B Corporate Contracts & Monthly Billing

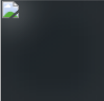
For commercial clients (e.g., taxi companies, car rental agencies, police fleets, delivery vans), the system provides a comprehensive B2B Contract Billing module ([?page=contracts](#) & [?page=contract_billing](#)).

6.1 Setting Up a Corporate Contract

1. **Create Corporate Contract:** Link a registered customer profile to an active contract by specifying a Start Date, End Date, and Contract Duration (in months).
2. **Assign Corporate Fleet Vehicles:** Add all company vehicle plate numbers to the contract in *Contract Cars* ([?page=contract_cars](#)).
3. **Configure Custom Contract Pricing:** In *Contract Services* ([?page=contract_services](#)), set special discounted prices for specific services (e.g., standard Exterior Wash is \$12.00, but the taxi fleet contract pays \$8.00).

6.2 Issuing Contract Tickets & Generating Monthly Statements

- **Unpaid POS Checkout:** When a contracted vehicle enters the POS, the cashier ticks "**Mark as Contract Ticket**". The system applies the contracted pricing automatically, marks the ticket as unpaid, and records it under the current billing month.
- **Monthly Invoice Generation:** At the end of the month, open **Contract Billing** ([?page=contract_billing](#)) to view total billed amounts per contract. Click " **Export PDF Statement**" to generate a formal TCPDF invoice listing every vehicle wash, date, and plate number for corporate payment.



OPERATIONS

POS (New Ticket)

Customers

Cars

Services

Accessories

B2B & RETENTION

Contracts

Contract Billing

Loyalty & Rewards

ADMIN & REPORTS

Reports

Operator Payroll

Users

License

Language: English

Loyalty & Customer Rewards

Exchange Rate: 10 Points = \$1.00 Discount

Manage customer loyalty point balances and promotional discount periods.

ACTIVE LOYALTY MEMBERS0

TOTAL POINTS ISSUED0 pts

TOTAL EXCHANGE VALUE\$0.00

Customer Loyalty Rewards Balances

Search customer or phone...

Customer Name	Phone	Registered Cars	Points Balance	Equivalent Value
Ahmed Al-Sayed	0912345678	1 cars	0 pts	\$0.00

Create Promotional Event

Scheduled Loyalty Promotions

Event Name *
e.g. Double Rewards Wer

Start Date *
08/08

End Date *
08/11

Discount % (Max 50%) *
10

Event Name	Start Date	End Date	Discount %	A
No promotional discount events scheduled.				

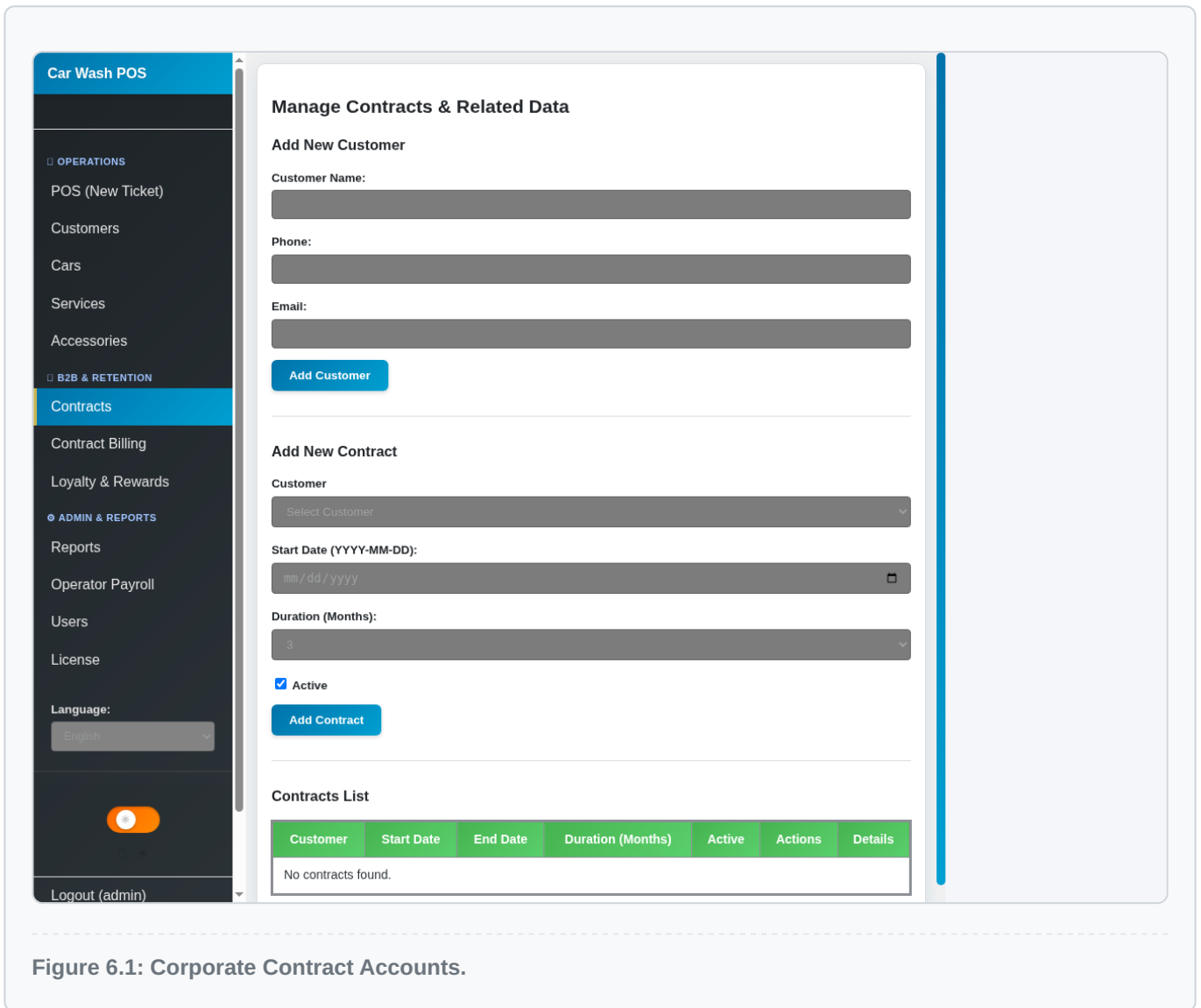
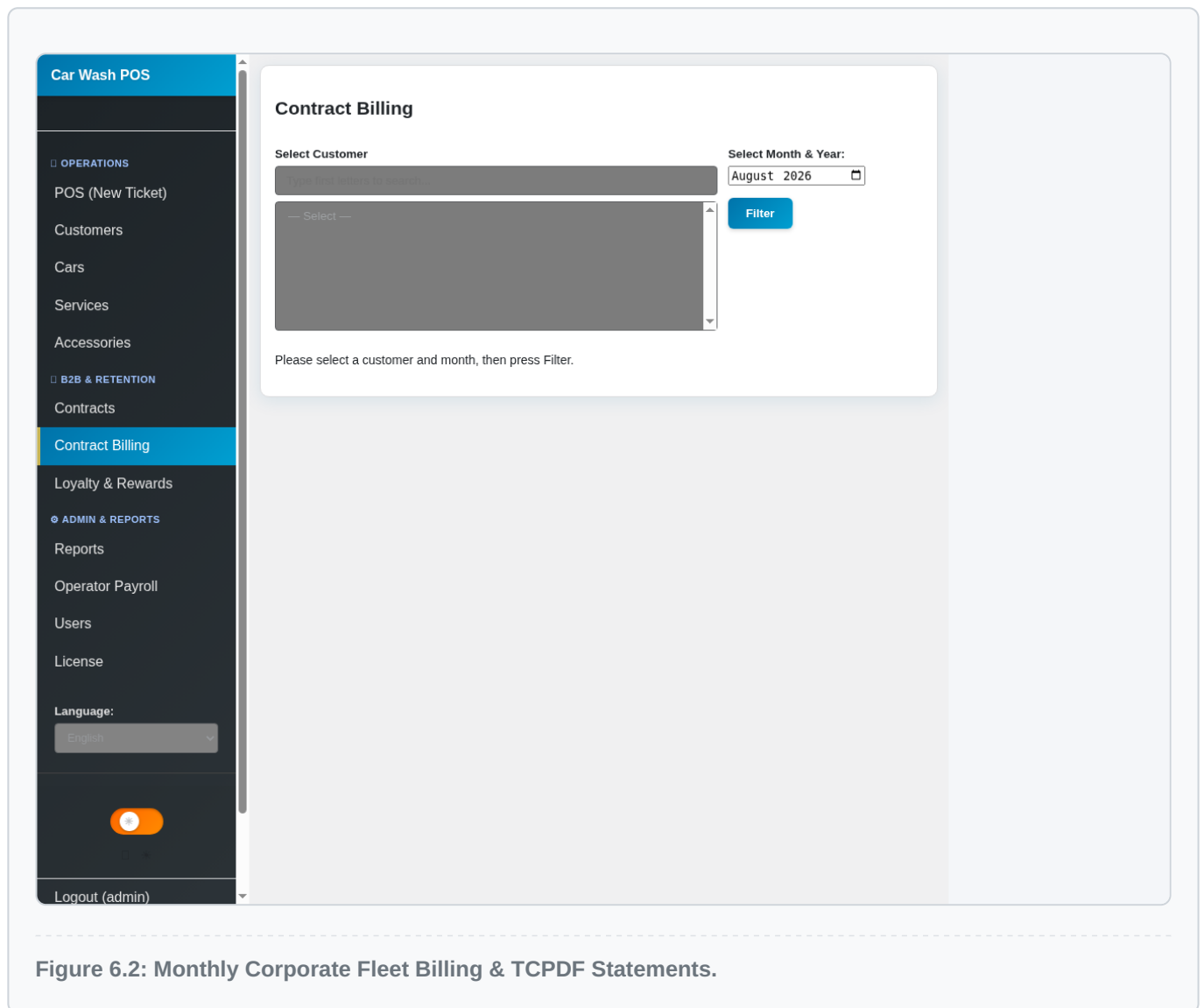


Figure 6.1: Corporate Contract Accounts.



7. Customer Loyalty & Rewards Dashboard

The Loyalty Program ([?page=loyalty](#)) replaces complex points systems with a fair, logical, and transparent earning and redemption model that protects customer balances while driving repeat business.

7.1 Core Loyalty Rules & Formulas

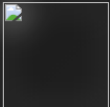
Program Rule / Parameter	System Formula / Value	Example Calculation
Earning Rate	10 Points earned per service wash	1 Service Wash = +10 Points
Exchange Rate	10 Points = \$1.00 Discount (\$0.10/point)	100 Points = \$10.00 Discount
Redemption Behavior	<code>points = GREATEST(0, points - redeemed)</code>	Redeeming 40 points from a 100 pt balance leaves 60 points intact

```
[ Loyalty & Customer Rewards Dashboard] Exchange Rate: 10 Points = $1.00
Discount Active Loyalty Members: 142   Total Points Issued: 4,820 pts   Total
Exchange Value: $482.00
-----
Customer Name Phone Registered Cars Points Balance Equivalent Value Quick Adjust
-----
Ahmed Al-Sayed 0912345678 2 cars 140 pts $14.00 [+10] [-10] [0] Khaled Mahmoud
0923456789 1 car 80 pts $8.00 [+10] [-10] [0]
```

Figure 7.1: The Loyalty Rewards management table showing equivalent dollar values and quick adjustment buttons.

7.2 Managing Customer Balances & Promotional Events

- **Quick Point Adjustments:** In the Customer Rewards table, administrators can manually reward or adjust customer balances using the **+10**, **-10**, or **0 (Reset)** action buttons.
- **Promotional Discount Periods:** Create date-bounded discount events (e.g., "Double Rewards Week" with a 10% promotional discount percentage applied across services).



☐ OPERATIONS

POS (New Ticket)

Customers

Cars

Services

Accessories

☐ B2B & RETENTION

Contracts

Contract Billing

Loyalty & Rewards

⦿ ADMIN & REPORTS

Reports

Operator Payroll

Users

License

Language:

English ▼

Warning: Undefined variable \$operators in /home/user/carwash4/public/views/payroll.php on line 56

Fatal error: Uncaught TypeError: count(): Argument #1 (\$value) must be of type Countable|array, null given in /home/user/carwash4/public/views/payroll.php:56 Stack trace: #0 /home/user/carwash4/public/index.php(267): require() #1 {main} thrown in /home/user/carwash4/public/views/payroll.php on line 56

Car Wash POS

OPERATIONS

POS (New Ticket)

Customers

Cars

Services

Accessories

B2B & RETENTION

Contracts

Contract Billing

Loyalty & Rewards

ADMIN & REPORTS

Reports

Operator Payroll

Users

License

Language: English

Logout (admin)

Loyalty & Customer Rewards

Exchange Rate: 10 Points = \$1.00 Discount

Manage customer loyalty point balances and promotional discount periods.

ACTIVE LOYALTY MEMBERS

0

TOTAL POINTS ISSUED

0 pts

TOTAL EXCHANGE VALUE

\$0.00

Customer Loyalty Rewards Balances

Customer Name	Phone	Registered Cars	Points Balance	Equivalent Value	Quick
Ahmed Al-Sayed	0912345678	1 cars	0 pts	\$0.00	

Create Promotional Event

Event Name *

Start Date *

End Date *

Discount % (Max 50%) *

Scheduled Loyalty Promotions

Event Name	Start Date	End Date	Discount %	Actions
No promotional discount events scheduled.				

Figure 7.2: Customer Loyalty & Rewards Dashboard with live balances and point adjustments.

8. Shop Labor Modes & Operator Payroll

To support different carwash business models (dedicated detailing bays, split assembly lines, or express conveyor teams), the system provides three distinct **Shop Labor Modes** configured in *Admin* → *Operator Payroll* ([?page=payroll](#)).

8.1 The 3 Shop Labor & Commission Modes

Shop Labor Mode Selector Card (Operator Payroll)

```
[ Shop Labor Mode] [ Mode 1: Solo Bay Operator (1 Ticket = 1 Worker) ▼ ] |  
Mode 1: Solo Bay Operator (1 Ticket = 1 Worker) | | Mode 2: Multi-  
Operator Split (Bay Tagging) | | Mode 3: Team Shift Pool (Shared Assembly  
Line) |
```

100% of ticket commission goes to the tagged operator.

Figure 8.1: The Shop Labor Mode selector card on the Operator Payroll screen.

- **Mode 1: Solo Bay Operator (1 Ticket = 1 Worker)** — Designed for detailing centers where one operator washes or details a car from start to finish. 100% of the wash commission is credited to that operator.
- **Mode 2: Multi-Operator Split (Bay Tagging)** — Designed for shops where workers specialize (e.g., Exterior Wash, Interior Vacuum, Wheel Polish). Multiple operators can be tagged on a single ticket, and the wash commission is divided equally among them.
- **Mode 3: Team Shift Pool (Shared Assembly Line)** — The most popular model for express carwashes. No workers are tagged on individual tickets. Instead, all wash commissions generated during the day are pooled into a **Daily Team Pool** and divided equally among all active operators working that shift.

8.2 Flexible Employee Compensation Models

In **Users Management** ([?page=users](#)), every employee role (Operator, Cashier, Accountant, Branch Admin, and Regional Manager) can be assigned a flexible pay model:

- **Salary Only:** Fixed weekly or monthly salary ([\\$base_salary](#)).
- **Commission Only:** Paid strictly per car washed (e.g., Small = \$2.00, Medium = \$3.00, Large = \$4.00).
- **Hybrid (Salary + Commission):** Guaranteed base salary plus earned wash commissions.

[Staff Payroll & Earnings Sheet (2026-08-01 to 2026-08-06)] [Print Payout Sheet]

Employee Name	Role	Pay Model	Base Salary	Total Washes	Revenue	Comm (\$)	Total Payout
---------------	------	-----------	-------------	--------------	---------	-----------	--------------

Tariq M.	OPERATOR	Hybrid	\$300.00	32	\$384.00	\$96.00	\$396.00
Yasser K.	OPERATOR	Hybrid	\$300.00	28	\$336.00	\$84.00	\$384.00
admin	OWNER	Salary	\$800.00	—	\$0.00	\$0.00	\$800.00

TOTALS	\$1,400.00	60	\$720.00	\$180.00	\$1,580.00		
--------	------------	----	----------	----------	------------	--	--

Figure 8.2: The Staff Payroll & Earnings Sheet displaying Salary, Commission, and Total Payout Due.

Car Wash POS

OPERATIONS

POS (New Ticket)

Customers

Cars

Services

Accessories

B2B & RETENTION

Contracts

Contract Billing

Loyalty & Rewards

ADMIN & REPORTS

Reports

Operator Payroll

Users

License

Language:

English

Logout (admin)

Operator Payroll & Commissions

Print Payout Sheet

Track labor operator wash counts, generated revenue, and commission payouts.

Shop Labor Mode

Mode 1: Solo Bay Operator (1 Ticket = 100% of ticket commission goes to the tagged operator.)

Start Date:08/01/2026

End Date:08/06/2026

Filter Payouts

Today

This Week

This Month

TOTAL BASE SALARIES

\$1,100.00

EARNED COMMISSIONS

\$

Warning: Undefined variable \$totalComm in /home/user/carwash4/public/views/payroll.php on line 155

Deprecated: number_format(): Passing null to parameter #1 (\$num) of type float is deprecated in /home/user/carwash4/public/views/payroll.php on line 155

0.00

TOTAL PAYROLL & PAYOUT DUE

\$1,100.00

Figure 8.3: Operator Payroll & Commission Sheet with Shop Labor Mode selector.

Haimoura Carwash POS — Official User Manual (v4.0.4 & v5.0.0)

Page 21 of 31

9. Management Reporting & Financial Analytics

The Reports module ([?page=reports](#)) provides owners and accountants with complete visibility into sales performance, discounts, and register totals.

- **Daily Sales & Transaction Reports:** View total cars washed, gross revenue, loyalty discounts, and net cash/card receipts for any date.
- **Weekly & Monthly Breakdowns:** Track business trends over time to identify busy days and peak periods.
- **TCPDF Document Export:** Every report can be exported with 1 click into formal A4 PDF documents formatted with your carwash branding and logo.

⚠ WARNING: LICENSE NO LICENSE INSTALLED! (No license installed) | ⏸ Automatic logout in 120 seconds. Please renew in Admin -> License.

OPERATIONS

POS (New Ticket)

Customers

Cars

Services

Accessories

B2B & RETENTION

Contracts

Contract Billing

Loyalty & Rewards

ADMIN & REPORTS

Reports

Operator Payroll

Users

License

Language:
English

License Management

Current License Status

Status:

EXPIRED / INVALID

License ID:

(None)

Product Code:

CARWASH_POS

Edition:

carwash (Single-Branch / 1 Location per License)

License Type:

none

Expires At:

Lifetime / ∞

Days Remaining:

No license installed

Machine Fingerprint:

0107747a

Provide this fingerprint when generating or renewing a license.

Reason / Details:

No license installed

Install or Update License Token

Paste your license token below to activate or renew Carwash POS.

License Token:

Paste license token here (e.g.
eyJ2IjoxLCJpZCI6IkkxJQy8yMDI2LTAwMDAwMSIs...)

Install & Activate License

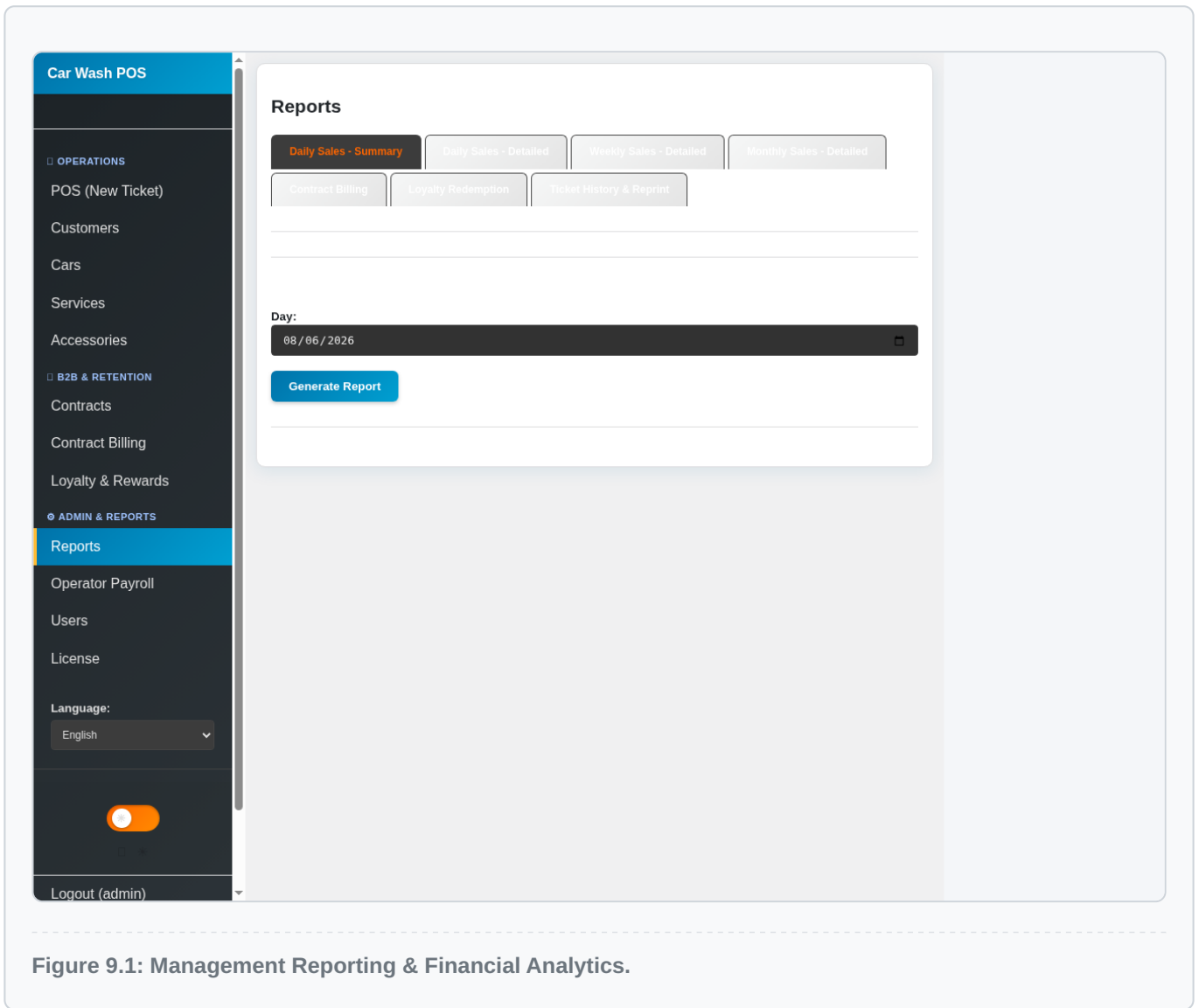


Figure 9.1: Management Reporting & Financial Analytics.

10. System Security, Role-Based Access & Offline Licensing

The system enforces strict role-based security and 100% offline cryptographic license verification.

10.1 User Roles & Permissions

User Role	Assigned Permissions & Operational Scope
Owner / Regional Manager	100% system access across all modules, payroll, license, and all branch locations.
Admin / Branch Admin	Full operational management (POS, Customers, Cars, Services, Contracts, Reports) for their assigned branch.
Cashier	Front-desk POS checkout, Walk-in ticket creation, and Customer/Car lookup.
Accountant	Access to Contract Billing, Reports, and Payroll reconciliation sheets.
Operator	Labor operator profile for wash attribution and commission tracking.

10.2 Offline Ed25519 Licensing & Per-Branch Policy

The system integrates the Haimoura Licensing SDK to verify signed Ed25519 license tokens locally without internet access. The public key is configured via the `LIC_VENDOR_PUBKEY_HEX` constant in `config/config.php` (or `config/license.php`).

Strict Per-Branch Licensing Policy:

All Carwash POS licenses are issued strictly **PER-BRANCH (1 License = 1 Shop/Location)**. Separate shop locations or extra branches require their own individual license tokens.

10.3 License Expiration Protection (Banner & 2-Minute Logout)

When a license expires or enters an offline grace period, the system enforces two automated protections:

- Top Red Expiration Banner:** A fixed red banner is displayed across the top of all screens (including the login screen) showing how many days ago the license expired.
- 2-Minute (120-Second) Automatic Logout:** If an administrator or cashier logs in while the license is expired, a live 120-second countdown timer begins. At 0 seconds, the session is forcibly terminated and redirected to `login.php?expired_logout=1`. The admin can paste a renewed token in *Admin* → *License* (`?page=license`) within the 120-second window to restore instant active status.

⚠ **WARNING: LICENSE EXPIRED 30 DAYS AGO!** (The license expired 30 days ago. Renewal is mandatory.) | Automatic logout in 114 seconds. Please renew in Admin -> License.

Figure 10.1: The top red expiration warning banner and live 120-second automatic logout countdown.



This site can't be reached

127.0.0.1 refused to connect.

Try:

- Checking the connection
- [Checking the proxy and the firewall](#)

ERR_CONNECTION_REFUSED

Details

Reload

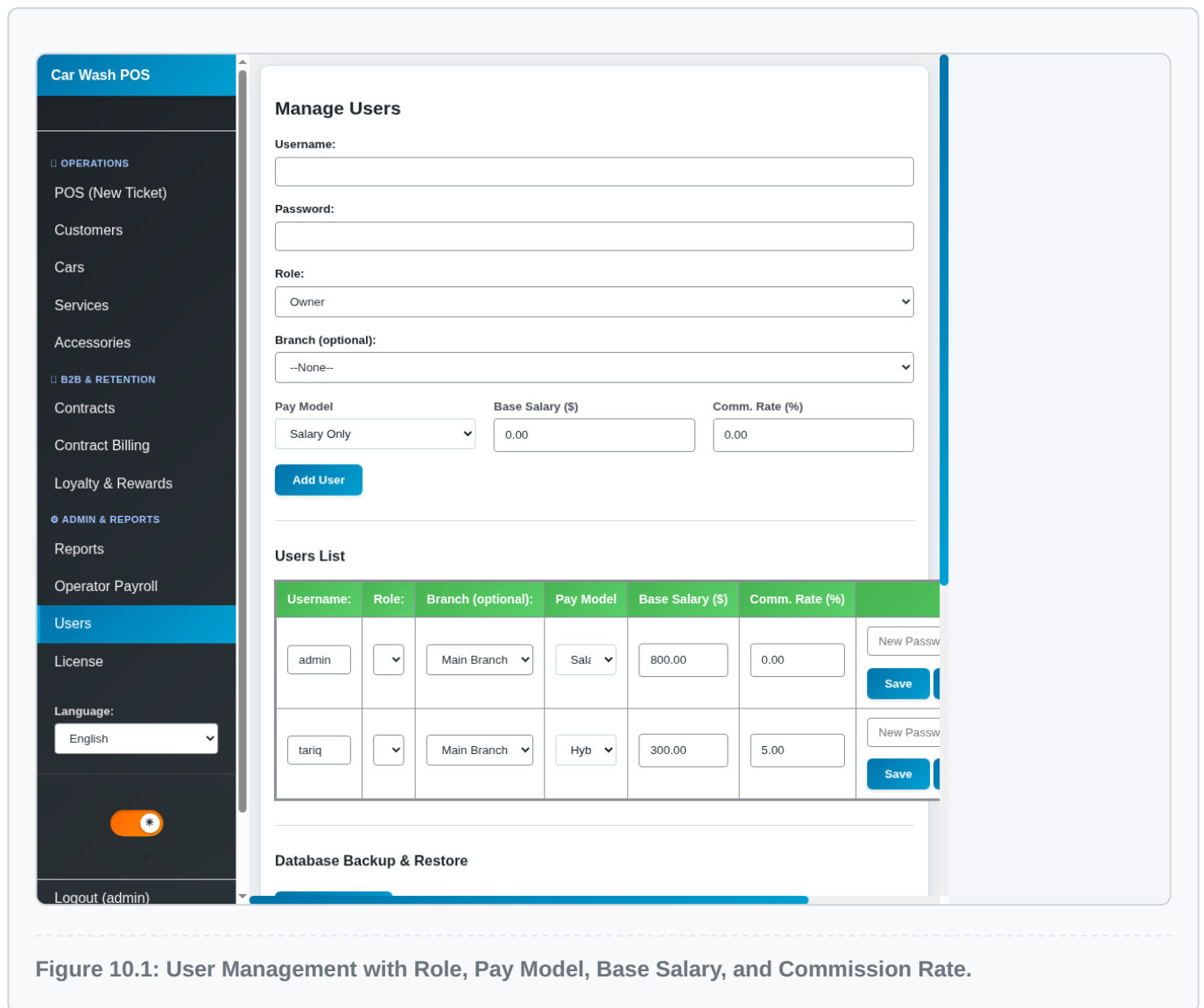


Figure 10.1: User Management with Role, Pay Model, Base Salary, and Commission Rate.

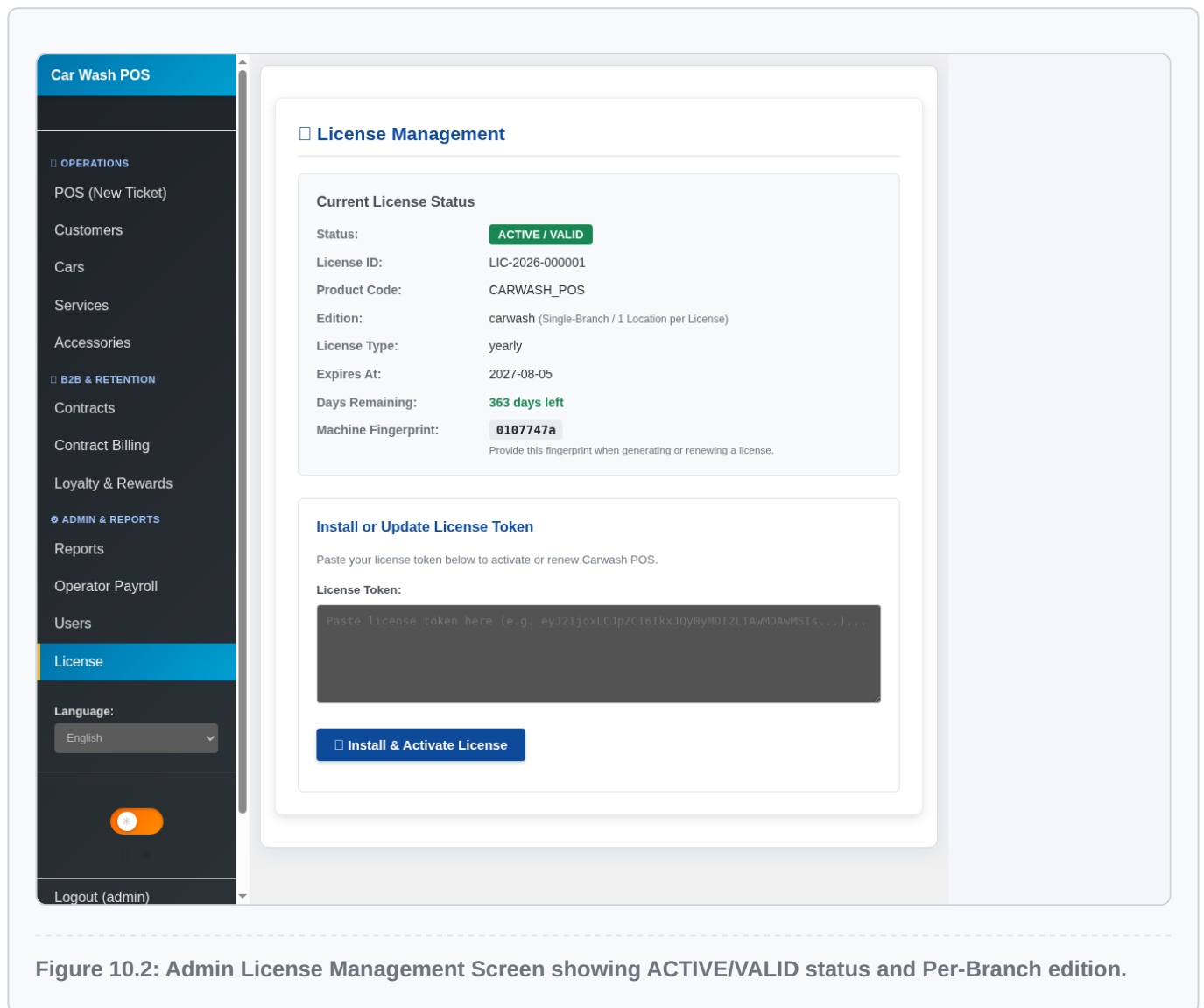


Figure 10.2: Admin License Management Screen showing ACTIVE/VALID status and Per-Branch edition.

11. Multi-Branch Ecosystem (v5.0.0 Edge-to-Cloud & HQ Control Tower)

Note: This final chapter is dedicated to businesses operating multiple carwash locations under version 5.0.0. Single-site users operating v4.0.4 can skip this chapter.

The version 5.0.0 ecosystem separates operations into local edge shop clients (`carwash5.zip`) and a centralized corporate cloud control tower (`carwash5-HQ.zip`):

11.1 The Edge-to-Cloud Hub & Spoke Architecture

Because carwashes cannot afford operational downtime during internet outages, shop clients never rely on a live cloud connection to process washes. Instead, they operate locally on `localhost` and initiate an outbound background handshake to `CARWASH_HQ_URLBASE` every 5 minutes when online:

- **Pushes Up (`?action=sync_push`)**: Sends newly completed wash tickets, cashier register closes, and walk-in customer registrations to HQ.
- **Pulls Down (`?action=sync_pull`)**: Receives queued service price updates, corporate contract accounts, and loyalty promotions from HQ, immediately updating the local MySQL database.

11.2 Composite Deduplication Engine

To prevent ID collisions when multiple offline shops create Transaction #1001 simultaneously, `carwash5(HQ)` identifies all incoming records using composite keys: `(branch_code, local_id)`. Record #1001 from Branch 1 becomes `BR01-1001` at HQ, completely isolated from Branch 2's `BR02-1001`.

11.3 Central HQ Control Tower Features

1. Branch Scope Switcher

In the top header of the HQ portal, administrators can switch between `Company-Wide Consolidated HQ` (showing aggregated totals across all branches) or drilling down into individual branch scopes (e.g., `BR-01 Downtown`, `BR-02 Northside`).

2. Financial Debit / Credit Net P&L Summary Card

HQ displays a real-time financial profitability scorecard across all connected branch locations:

- `Total Gross Revenue (Credits / Sales)` — Consolidated revenue from all closed wash tickets.
- `Total Payroll & Commissions (Debits / Expenses)` — Consolidated staff salaries and earned commissions due.

- **Net Profitability (Net P&L)** — Calculated instantly as **Gross Revenue - Total Debits** , showing clear branch profitability.

```
[ ▲ carwash5(HQ) — Executive Cloud Report Farm] Branch Scope: [   Company-Wide
Consolidated HQ ▼ ] Connected Branches: 3 ● All Online Today's Washes: 184 cars
Consolidated Revenue: $4,280.00
-----
Total Gross Revenue (Credits): $4,280.00 Total Payroll & Comm (Debits):
$1,580.00 Net P&L: +$2,700.00
=====
```

Figure 11.1: The HQ Control Tower summary displaying consolidated Debits, Credits, and Net Profitability.

3. HQ Push & Sync Queue Manager

HQ administrators can broadcast catalog and CRM updates to all branches or specific locations. Selecting a target branch, update type (*Service Price Update*, *Corporate Fleet Customer*, or *Loyalty Promotion*), and title queues the update in `data/push_queue.json` . The live queue table monitors whether each item is **Pending Client Pull** or **Delivered (timestamp)** .

4. Advanced Operator Efficiency Scorecard (Weighted SBT Analysis)

To eliminate unfair comparisons between exterior express line washers and interior detailing specialists, HQ evaluates operators using **Weighted Standard Benchmark Times (SBT)**:

- **Exterior Express Wash (Small Car)** — Standard Benchmark Time: **12 minutes (1.0x Weight)**.
- **Full Wash + Interior Vacuum** — Standard Benchmark Time: **35 minutes (3.0x Weight)**.
- **Deep Detailing & Polish** — Standard Benchmark Time: **75 minutes (6.25x Weight)**.

The scorecard compares **Earned Benchmark Hours** against **Actual Shift Hours**. An operator washing 6 interior detail cars (7.5 earned hours in a 7-hour shift) is rated at **107% Above Benchmark**—identical efficiency to an operator washing 32 express exterior cars. Shifts exceeding 115% efficiency are flagged as **Overloaded Shift Bottlenecks** needing an assistant operator.

[Advanced Operator Efficiency Scorecard (Weighted SBT Analysis)]

Operator Name	Branch	Primary Role	Cars	Earned Hrs	Shift Hrs	Efficiency	HQ Recommendation
Tariq M.	BR-01	Downtown Exterior Express Line	32	6.4 hrs	6.0 hrs	107%	Optimal volume speed
Yasser K.	BR-01	Downtown Interior Detailing	6	7.5 hrs	7.0 hrs	107%	Top detailing perf.
Ahmed S.	BR-02	Northside Exterior Express Line	38	7.6 hrs	6.5 hrs	117%	[WARN] ⚠ Assign assistant
Khalid R.	BR-03	Airport Wheel Polish & Vacuum	11	2.8 hrs	6.5 hrs	43%	[ALERT] ⚠ Underperforming

Figure 11.2: The HQ Weighted SBT Operator Scorecard identifying top performers, shift bottlenecks, and idle bays.

5. Consolidated Corporate Fleet Billing

Corporate fleet accounts (e.g., DHL Express, Airport Taxi Corp) can wash vehicles at any branch location. HQ consolidates all monthly tickets across **BR-01** , **BR-02** , and **BR-03** into single corporate invoices payable to HQ, complete with a " **Email Consolidated Invoice**" 1-click action.

End of Official User Manual

For technical assistance, license token renewals, or custom integrations, contact Haimoura Support at +201509088752.



This site can't be reached

127.0.0.1 refused to connect.

Try:

- Checking the connection
- [Checking the proxy and the firewall](#)

ERR_CONNECTION_REFUSED

Details

Reload

Figure 11.3: carwash5(HQ) Cloud Executive Report Farm, Push Queue Tower, and Weighted SBT Operator Scorecard.