

SolarWarranty Pro

Training Manual

Multi-Manufacturer Warranty Management System

Version 2.3

April 2026

Computer Aided Business Systems
Lagos, Nigeria

Document Information

Document Version	2.3 April 2026
Product Version	SolarWarranty Pro v2.3
Audience	Staff, Managers, Technicians, and Administrators
Classification	CONFIDENTIAL — for trained staff only
Requirements	Application must be running and accessible during training
What's new in this revision	v2.3 simplifies licence activation (typed key + .swpkey file replacing the five typed fields), introduces file-based deactivation tokens (.swpdt), and adds a Help → User Guide menu item that opens the bundled documentation in your default browser. All v2.1 training content is preserved unchanged: Manufacturer Claim Report (Unit 6), Escalation workflow (Unit 5), Excel xlsx leading-zero detection (Unit 13), Live Warranty Result preview (Unit 9), Force Password Change (Unit 14), Role Permissions (Unit 10), and Technician/User account auto-linking.

NEW IN v2.1: Production hardening — 12 fixes from pre-release testing: (1) Audit log noise silenced. (2) Duplicate technician records prevented. (3) Manufacturer claim auto-creates on every Approve. (4) Inventory shows Manufacturer + Sub-Type. (5) Manufacturer name on every claim display. (6) Void reasons no longer multiply on seed. (7) Live Warranty Result preview on Inspection. (8) Escalated claims have a clear resolution path. (9) Brand colour propagates everywhere. (10) Reports menu visible to Staff. (11) Excel xlsx leading-zero detection. (12) Manufacturer Claim Report PDF feature.

Unit 1 — Introduction to This Training Manual

1.1 How to Use This Manual

This manual is divided into role-based training units. Complete only the units relevant to your role, although reading all units is encouraged for a complete understanding of how the system works end-to-end.

Role	Complete These Units
Staff	Units 2 (Login & Dashboard), 3 (Product Registration), 4 (Claim Submission), 8 (Customers, Installers & Technicians), 12 (Reports), 14 (Password Management)
Manager	Units 2, 3, 4, 5 (Claim Management & Decisions — incl. Escalation), 6 (Manufacturer Claims — incl. Manufacturer Claim Report PDF), 7 (Inventory), 12 (Reports), 13 (Bulk Import — incl. xlsx warning), 14 (Password Management)
Technician	Units 2, Unit 9 (Technician Inspection — incl. live Warranty Result preview), Unit 14 (Password Management)
Administrator	All Units including 10 (Administration — incl. Role Permissions), 11 (Manufacturers & Warranty Settings), 14 (Password Management)

1.2 Training Format

Each unit contains Learning Objectives, instructional content, Worked Examples, Exercises, and a Knowledge Check. Visual cues are used throughout:

- Green Learning Objectives box opens each unit
- Blue Worked Example box shows a scenario worked through step-by-step
- Lavender Exercise box gives hands-on practice with expected results
- Amber Knowledge Check box closes each unit with self-assessment questions
- Amber callouts for NOTE and TIP guidance
- Pink callouts for WARNING, POLICY, and IMPORTANT items
- Green NEW IN v2.1 callouts highlight features carried forward from v2.1, all retained in v2.3

1.3 SolarWarranty Pro at a Glance — Multi-Manufacturer

SolarWarranty Pro is designed for dealerships that sell and service products from multiple manufacturers. Each manufacturer has its own warranty periods, void reasons, and cost-recovery claim log. The end-to-end flow:

Step	Stage	Who Does It
1	Product sold and installed	Installer (external)
2	Product registered — manufacturer selected	Staff on same day
3	Customer reports fault	Customer contacts dealership
4	Claim submitted — warranty checked automatically	Staff
5	Technician assigned and inspects on-site	Manager assigns, Technician visits

6	Decision made (Approve / Reject / Escalate)	Manager
6a	Escalated claim resolved (Approve or Reject)	Admin
7	Resolution actioned — replacement issued	Staff
8	Manufacturer Claim Report PDF generated and submitted	Manager
9	Manufacturer responds; compensation recorded	Manager
10	Claim closed	Staff after resolution confirmed
*	Warranty periods configured per manufacturer	Administrator via Admin > Manufacturers

Unit 2 — Login & Dashboard

For All Roles · Duration: 25 minutes

LEARNING OBJECTIVES — By the end of this unit you will be able to:

- Log in with your assigned credentials
- Complete the Force Password Change dialog on first login
- Identify what each of the 6 dashboard tiles represents
- Navigate to any module using the menu bar
- Log out correctly at the end of a session

2.1 Logging In

The Login screen is the first thing you see when the application starts. Enter your username and password and press Enter or click Login. The system allows 5 attempts before it locks — restart the application to reset the counter.

Default credentials for the admin account: admin / Admin@1234

2.2 First Login — Required Password Change

On your very first login, or whenever an administrator has reset your password, the system **REQUIRES** you to change your password before you can enter the main application. The Change Password dialog appears automatically immediately after your credentials are accepted.

This is a security feature — it ensures that admin-assigned temporary passwords are never retained, and that only you know your final password.

IMPORTANT: If you click Cancel on the Change Password dialog, a confirmation prompt warns you that cancelling will log you out. If you confirm, you are returned to the login screen with the message “Password change is required to continue.” You cannot access any part of the application without completing the change. Unit 14 covers password management in full detail.

2.3 Understanding the Dashboard

The dashboard shows six live tiles that update automatically every 60 seconds. These tiles give a real-time health check of the entire business across all manufacturers:

Tile	What it Shows
Total Registered Products	Total units ever registered across all manufacturers. Only ever goes up.
Open Claims	Claims in any status except Closed or Rejected (includes Escalated). A high number means unresolved customer issues.
Fraud Flags (Unreviewed)	URGENT — claims with fraud alerts still in an open status. Managers must review these.
Mfr Claims Pending	Claims submitted to manufacturers but not yet Approved or Rejected. Tracks money owed.
Low Stock Alerts	Inventory lines at or below their low stock threshold — requires restocking.

Recovery This Month	Total compensation received from ALL manufacturers this calendar month.
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TIP: Note that Recovery This Month sums compensation across all manufacturers. See Unit 6 to learn how to view recovery broken down by manufacturer.

2.4 Role-Based Menus

The menu bar only shows items your role is permitted to access:

Role	Menus Visible
Staff	Products, Claims, Inventory, Customers, Reports
Manager	Products, Claims, Manufacturer, Inventory, Customers, Reports
Technician	Claims > My Inspections only
Admin	All menus including Admin

EXERCISE — 2.1 Login and Explore the Dashboard: Scenario: Log in and familiarise yourself with the dashboard.

Steps to complete:

- Open SolarWarranty Pro
- Log in with your provided credentials
- If this is your first login, complete the Change Password dialog — see Unit 14 for details. For training purposes your trainer will provide the password rules.
- Look at the 6 dashboard tiles. Write down the current number in each tile.
- Click each item in the green menu bar to see what menus appear for your role. Do NOT click any menu items yet — just identify what is available.
- Note the status bar at the bottom: it shows your name, role, and today's date.

Expected result: You are logged in, you have completed any required password change, you can name all 6 tiles, and you know which menus are visible for your role.

KNOWLEDGE CHECK: Answer without referring to the guide. Check answers with your trainer.

1. How many failed login attempts are allowed before the application must be restarted?

Answer: _____

2. What happens automatically after your very first successful login, before you see the main application?

Answer: _____

3. What does the “Recovery This Month” tile measure?

Answer: _____

4. How often does the dashboard automatically refresh?

Answer: _____

5. Name two differences between what a Manager sees versus what a Technician sees in the menu bar.

Answer: _____

Unit 3 — Product Registration

For Staff and Above · Duration: 45 minutes

LEARNING OBJECTIVES — By the end of this unit you will be able to:

- Explain why every product must be registered and what happens if it is not
- Select the correct manufacturer when registering a product
- Register an inverter, battery, and solar panel correctly
- Understand how the warranty expiry date is calculated automatically per manufacturer
- Search for any registered product by serial number, customer name, or model

3.1 Why Registration Cannot Be Skipped

When a customer calls to report a fault, the very first thing the system checks is: Is this product registered? If the answer is No, the system returns NOT REGISTERED and no claim can proceed. Staff **MUST** register every unit, every time, on the day of installation.

POLICY: Every product must be registered within 24 hours of installation. Unregistered products that develop faults will be automatically denied warranty claims.

3.2 The Multi-Manufacturer Dimension

SolarWarranty Pro supports multiple manufacturers. This means:

- Each manufacturer has its own configured warranty periods (e.g. SunPower Inverter = 24 months, EcoSun Inverter = 36 months)
- Each manufacturer has its own manufacturer claim log for cost recovery
- Selecting the correct manufacturer at registration time is critical — it determines the warranty period and which claim log the product feeds into

IMPORTANT: Always confirm the manufacturer name on the product label or invoice before registering. Selecting the wrong manufacturer will set the wrong warranty period and route claims to the wrong manufacturer.

3.3 The Registration Form — Field by Field

Field	What to Enter
Manufacturer *	Select from the dropdown. Only active manufacturers appear. This is the first field to complete.
Serial Number *	Exactly as printed on the product label. Case-sensitive. System checks for duplicates instantly.
Batch Number *	From the product label or delivery note. Links to manufacturer's production batch.
Product Type *	Inverter, Battery, or Solar Panel. Changes the warranty months immediately upon selection.

Sub-Type	Optional further classification — e.g. Lithium / Lead-Acid / Gel for Battery; Hybrid / Off-Grid for Inverter. Free text, leave blank if not applicable.
Model Name	Full model name as on the label (e.g. SunPower 5KVA Hybrid).
Power Rating	Rated output (e.g. 5000W, 200AH, 400Wp).

Warranty Auto-Calculation

When you select the Manufacturer AND the Product Type, the Warranty Duration updates automatically to show the configured months for that specific combination. When you then set the Installation Date, the Expiry Date calculates immediately.

Example: SunPower Inverter = 24 months. EcoSun Inverter = 36 months. The same Product Type gives different warranty months depending on the manufacturer. This is why selecting the manufacturer first is critical.

Registration Metadata — Who Registered This Product

Every product registration automatically captures who registered it and when. This appears on the Warranty Certificate footer and in the audit log. You do not need to enter this information — it is captured from your logged-in session. This means it is important that staff log in as themselves and NOT share accounts.

WORKED EXAMPLE: Registering an Inverter. Scenario: A new customer, Mr Emeka Eze, has had a 5kW SunPower inverter installed today. Serial: INV20240999, Batch: SUNP-2024-B14, Invoice: INV-2024-00999. Installed by Sunrise Solar Installations Ltd in Lagos.

- Go to Products > Register New Product
- Manufacturer: select SunPower Corp from the dropdown
- Serial Number: type INV20240999. Field turns green (unique serial)
- Batch Number: type SUNP-2024-B14
- Product Type: select Inverter. Warranty shows 24 months (SunPower's configured Inverter period)
- Model Name: type SunPower 5KVA Hybrid. Power Rating: 5000W
- Customer Search: type Emeka Eze and click Search. Not found — click + New Customer
- Enter: Full Name = Emeka Eze, Phone = 0803-999888, Region = Lagos. Save
- Installer: select Sunrise Solar Installations Ltd
- Installation Date: today. Warranty Expiry updates to 24 months from today
- Location: No. 45 Nnamdi Azikiwe Street, Lagos. Invoice: INV-2024-00999
- Click Register Product. Confirm the success message showing the expiry date

EXERCISE — 3.1 Register Products from Two Different Manufacturers: Scenario: Your trainer will give you data cards for two products from different manufacturers.

Steps to complete:

- Register Product 1 (Manufacturer A, Inverter) using the data card provided. Note the warranty months shown — these are Manufacturer A's configured Inverter period.
- Register Product 2 (Manufacturer B, Inverter) using the data card provided. Note the warranty months shown — compare with Manufacturer A. They may differ.
- Search for both products in Products > Search / View Products
- In the grid, verify the Manufacturer Name column shows the correct manufacturer for each product
- Double-click each to verify the warranty expiry date is correct

Expected result: Both products appear in the grid with correct manufacturer names and different warranty expiry dates if the manufacturers have different configured periods.

EXERCISE — 3.2 Find a Product and Check Warranty Status: Scenario: A customer calls asking if their product is still in warranty.

Steps to complete:

- Go to Products > Search / View Products
- Search for the serial number of one of the products you registered in Exercise 3.1
- Observe the row colour: green = valid, amber = expires within 30 days, red = expired or void
- Double-click the row to open Product Detail
- Read the warranty validity message. Note the manufacturer name shown.

Expected result: Product found. Row colour matches warranty status. Product Detail shows manufacturer name and IN WARRANTY status.

KNOWLEDGE CHECK: Answer without referring to the guide. Check answers with your trainer.

1. What is the first field you should select on the Product Registration form and why?

Answer: _____

2. Two products are both Inverters but from different manufacturers. Will they necessarily get the same warranty period?

Answer: _____

3. A customer says their serial number is INV-200. The system turns the field red when you enter it. What does this mean?

Answer: _____

4. Do you need to manually enter who registered the product?

Answer: _____

5. A product is installed on 1 March 2025 and the manufacturer's configured Inverter period is 36 months. What is the warranty expiry date?

Answer: _____

Unit 4 — Claim Submission

For Staff and Above · Duration: 40 minutes

LEARNING OBJECTIVES — By the end of this unit you will be able to:

- Submit a warranty claim for a registered product
- Understand the four warranty status messages and what to tell the customer for each
- Understand what fraud flags are and how to respond
- Provide the correct claim number to the customer for follow-up

4.1 The Claim Intake Form

Go to Claims > Submit New Claim. Enter the serial number and click Search. The system instantly shows the product details, the manufacturer name, and the warranty status.

The Four Warranty Status Results

Result	Colour	What to Tell the Customer
WARRANTY VALID	Green	Proceed normally. Fault is covered under warranty.
WARRANTY EXPIRED	Red	Warranty period has ended. Claim can still be submitted for the record but will be rejected.
WARRANTY VOID	Red	Warranty was cancelled. Same as expired — submit for record, will be rejected.
NOT REGISTERED	Red	Serial not found. Cannot proceed. Ask for proof of purchase. Contact your manager.

The Claim Number Format

Every claim receives a unique claim number in the format CLM-YYYYMMDD-XXXXXX, where YYYYMMDD is today's date and XXXXX is a 5-digit sequence. For example, the second claim submitted on 18 April 2026 would be CLM-20260418-00002. This format makes it easy to see at a glance when a claim was submitted just by reading the number.

Writing a Good Fault Description

Minimum 20 characters required, but a good description is much more. It helps the technician prepare and the manager decide faster.

Poor	Good
"It stopped working." Too vague. Technician has nothing to prepare for the visit.	"Inverter made a loud continuous beeping sound then shut down. Display blank, no power output. Occurred during a thunderstorm. No surge protector fitted."

4.2 Fraud Flags

Fraud flags are automatic alerts raised by the system. They do not mean the claim is definitely fraudulent — they mean it needs closer management review. As Staff, when flags appear:

- Note the flags shown in the warning panel
- Tell the customer their claim is submitted but requires additional review
- Give them the claim number and advise a manager will be in touch within 2 working days
- NEVER promise the claim will be approved. NEVER ignore or try to bypass flags

WORKED EXAMPLE: Submitting a Claim. Scenario: Mr Seun Akinwale calls. His SunPower inverter (serial INV20240870) stopped working. Loud alarm then complete shutdown.

- Go to Claims > Submit New Claim
- Type INV20240870. Click Search. Verify: SunPower Corp shown as manufacturer. WARRANTY VALID shown in green.
- Claim Date: today
- Fault Description: type "The inverter emitted a loud continuous alarm then shut down completely. Display is blank with no power output. Customer reports this occurred after 3 weeks of use with no reported surges or misuse."
- Click Submit Claim. Note the claim number (e.g. CLM-20260418-00001).
- Tell Mr Akinwale: 'Your claim is submitted. Reference CLM-20260418-00001. A technician will contact you within 2 working days.'

EXERCISE — 4.1 Submit a Valid Warranty Claim: Scenario: Use one of the products you registered in Unit 3. The customer reports it is not working.

Steps to complete:

- Go to Claims > Submit New Claim
- Enter your product's serial number and click Search
- Confirm WARRANTY VALID and verify the manufacturer name shown matches your registration
- Set claim date to today
- Write a realistic fault description of at least 50 characters
- Click Submit Claim and note the claim number in CLM-YYYYMMDD-XXXXXX format
- Go to Claims > Manage Claims and find your new claim in the list

Expected result: Claim appears in Manage Claims with status New, correct warranty result Valid, correct manufacturer name, and claim number in CLM-YYYYMMDD-XXXXXX format.

KNOWLEDGE CHECK: Answer without referring to the guide. Check answers with your trainer.

1. A product search shows WARRANTY EXPIRED. What do you tell the customer?

Answer: _____

2. What is the minimum characters required in the fault description?

Answer: _____

3. A fraud flag appears after submitting. What are your next steps?

Answer: _____

4. What format does the claim number take, and what information does it encode?

Answer: _____

5. Can you submit a claim for a NOT REGISTERED product? What happens?

Answer: _____

Unit 5 — Claim Management & Decisions

For Managers · Duration: 60 minutes

LEARNING OBJECTIVES — By the end of this unit you will be able to:

- Filter and navigate the claims queue by status
- Assign a technician to a new claim
- Review an inspection report and make an Approve / Reject / Escalate decision
- Use the new Escalation workflow for borderline claims
- Raise a manufacturer claim automatically when approving any claim
- Close a completed claim

5.1 The Claims Queue

Go to Claims > Manage Claims. The left panel shows all claims. The right panel shows full details of the selected claim including the product manufacturer. Work through claims in this priority order:

- Escalated — admin attention required
- PendingReview — inspection complete, awaiting your decision
- New — need technician assignment
- Assigned/Inspecting — monitor for progress

5.2 Reading Fraud Flags

Flag	Severity	Manager Response
REPEAT_CLAIM	HIGH	Multiple claims for same product within 90 days. Review all prior claims for this serial. Escalate if fraud suspected.
HIGH_VOLUME	HIGH	Customer has 3+ claims in 60 days. Review all products claimed. Multiple installations can be legitimate — check if same fault pattern.
PHYS-DAMAGE	VOID	Technician confirmed physical damage. Reject the claim. Note the reason clearly.
NO-PHOTO	MEDIUM	Fewer than 3 photos uploaded. Request technician uploads more evidence before deciding.

5.3 Decision Framework

Decision	When to Choose It
Approve + Repair	Warranty valid, manufacturing or unclear defect, can be repaired on-site. No confirmed fraud.
Approve + Replace	Warranty valid, manufacturing defect confirmed, unit cannot be repaired or replacement is faster.
Reject	Warranty expired/void/not registered, OR user damage confirmed by technician, OR fraud confirmed.

Escalate	Borderline case where you cannot confidently approve OR reject. The Admin will resolve it.
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IMPORTANT: Manufacturer claim is auto-created on every Approve. When you Approve a claim with EITHER Repair OR Replace as the resolution, a manufacturer claim entry is automatically created in the corresponding manufacturer's claim log. You do not need to tick a checkbox or take any extra step. Both Repair and Replace produce a manufacturer claim ready for cost recovery.

5.4 The Escalation Workflow (NEW v2.1)

NEW IN v2.1: New escalation workflow. Use Escalate when a claim is genuinely borderline — unclear fault attribution, contested fraud flag, customer dispute, or anything else you would normally take to a senior person before deciding. Escalating sends the claim to the Admin without forcing you to choose Approve or Reject.

When you click Escalate and Save Decision:

1. A modal dialog opens asking for an Escalation Reason
2. Type at least 20 characters explaining why you are escalating. The character count appears live below the field. The Escalate button stays disabled until you reach 20 characters.
3. Click Escalate. The claim moves to the Escalated state.
4. Your name, the timestamp, and your reason are saved permanently with the claim.
5. The Admin will see the Escalated claim in their queue and resolve it.

WARNING: You cannot resolve your own escalation. If you re-open an Escalated claim later, you will see that the Approve / Reject / Escalate radio buttons and the Save Decision button are all DISABLED. This is by design — once a Manager has escalated, only an Admin can resolve. The Close Claim button remains available, but you cannot change the decision.

Technician Assignment Dropdown

When assigning a technician to a claim, the dropdown only shows active technicians whose user accounts are also active. If you need to assign a claim to a technician who does not appear in the dropdown, check:

- Has their technician record been deactivated? (Customers > Manage Technicians — tick Show Inactive)
- Has their user account been deactivated? (Admin > User Management)
- If either is inactive, the technician is excluded from the dropdown — see Unit 8 for details

WORKED EXAMPLE: Approve, Reject, and Escalate Decisions. Scenario: You have three PendingReview claims to work through. CLM-20260418-00002 is a clear approve, CLM-20260418-00003 is a clear reject, and CLM-20260418-00004 is borderline.

- Filter by PendingReview. Select CLM-20260418-00002. Diagnosis confirms a manufacturing defect, no fraud. Choose Approve, Resolution = Replace. Click Save Decision. Confirm the manufacturer claim entry is auto-created in the Mfr Claim Log.
- Select CLM-20260418-00003. Technician confirms physical damage by user. Choose Reject. Click Save Decision. No manufacturer claim created (correct — manufacturer is not liable for user damage).
- Select CLM-20260418-00004. The fraud flag REPEAT_CLAIM is present, but the technician's diagnosis is plausible. You're not sure. Choose Escalate. Click Save Decision.

- The Escalation Reason dialog opens. Type a clear reason of at least 20 characters: “Second REPEAT_CLAIM in 60 days but technician diagnosis seems plausible. Need senior review of customer history before approving.”
- Click Escalate. The claim is now in the Escalated state. The Admin will pick it up.

EXERCISE — 5.1 Process Claims from Multiple Manufacturers: Scenario: Your trainer has created claims for products from two different manufacturers.

Steps to complete:

- Log in as Manager
- Go to Claims > Manage Claims
- Select a claim from Manufacturer A. Note the manufacturer shown in the detail panel
- Make a decision and click Save Decision
- Select a claim from Manufacturer B. Note this manufacturer is different
- Make a decision for this claim
- Go to Manufacturer > Mfr Claim Log. Filter to Manufacturer A. Verify the approved claim appears
- Filter to Manufacturer B. Verify the claim appears separately

Expected result: Each manufacturer’s claim log shows only claims for that manufacturer. Decisions are correctly routed.

EXERCISE — 5.2 Escalate a Borderline Claim: Scenario: Your trainer will provide a borderline claim with a contested fraud flag.

Steps to complete:

- Log in as Manager
- Go to Claims > Manage Claims and select the borderline claim
- Choose Escalate as your decision
- Try clicking Save Decision with no reason text. Verify the dialog opens but the Escalate button is disabled.
- Type a brief reason (less than 20 characters). Verify the button is still disabled and the character count is shown.
- Type a reason of at least 20 characters explaining the issue. Verify the button enables.
- Click Escalate. Verify the dialog closes and the claim status becomes Escalated.
- Re-open the same claim. Verify Approve / Reject / Escalate radio buttons and Save Decision button are all DISABLED. The escalation reason and your username are visible in the decision panel.

Expected result: Claim escalated successfully with a recorded reason. Manager-cannot-self-resolve guard correctly prevents you from resolving your own escalation.

KNOWLEDGE CHECK: Answer without referring to the guide. Check answers with your trainer.

1. In what order should you prioritise working through the claims queue?

Answer: _____

2. When you Approve a claim with Resolution = Repair, what happens to the manufacturer claim log?

Answer: _____

3. A claim shows PHYS-DAMAGE flag. What decision should you make?

Answer: _____

4. What is the difference between Escalate and Reject?

Answer: _____

5. What is the minimum number of characters required in the Escalation Reason?

Answer: _____

6. You escalated a claim yesterday. Can you re-open it today and approve it yourself? Why or why not?

Answer: _____

7. Why might a technician not appear in the assignment dropdown?

Answer: _____

Unit 6 — Manufacturer Claims

For Managers · Duration: 50 minutes

LEARNING OBJECTIVES — By the end of this unit you will be able to:

- Explain why manufacturer claims are important for financial recovery
- Use the manufacturer filter to view claims for a specific manufacturer
- Locate the Internal Claim Number for each manufacturer claim
- Track a claim through all statuses from Pending to Approved
- Generate a Manufacturer Claim Report PDF
- Record a compensation payment
- Understand how Recovery This Month is calculated across all manufacturers

6.1 Why This Module Matters

Every replacement issued under warranty has a cost. When the fault is a manufacturing defect, the dealership can claim that cost back from the manufacturer. This module is how that recovery happens. Failing to submit manufacturer claims means the dealership absorbs costs the manufacturer should pay.

6.2 Multi-Manufacturer Claim Log

Go to Manufacturer > Mfr Claim Log in the menu bar. Use the Manufacturer filter at the top of the screen to view claims for a specific manufacturer or all manufacturers at once. Each manufacturer has a completely separate claim log within this single screen.

The grid includes an Internal Claim Number column showing the source ClaimNumber from your own claim log — making it easy to cross-reference a manufacturer claim back to the original warranty claim that triggered it.

TIP: Use the Manufacturer filter dropdown at the top of the screen to show All Manufacturers in a single combined view, or filter to one specific manufacturer. The Recovery This Month dashboard tile always shows the total across all manufacturers.

6.3 Claim Statuses

Status	Meaning and Action
Pending	Created automatically when a claim is Approved. Prepare your evidence and send to the manufacturer. Click Mark as Submitted.
Submitted	Evidence sent. Monitor for manufacturer response. Chase after 30 days if no reply.
Approved	Manufacturer accepted. Enter compensation amount and payment date.
Rejected	Manufacturer rejected. Enter their reference and reason. Consider appeal if unjustified.

6.4 Evidence Package

When submitting to a manufacturer, the evidence package should include:

- The Manufacturer Claim Report PDF (see §6.5 below) — this is the v2.1 way to package the structured data

- At least 3 photographs from the technician's inspection (attach separately to the email)
- A cover letter referencing the internal claim number in format CLM-YYYYMMDD-XXXXX

6.5 Manufacturer Claim Report (PDF) — NEW v2.1

NEW IN v2.1: New in v2.1. Generate a complete branded claim package as a PDF and send it to the manufacturer in one click. The PDF header colour follows your dealership's primary brand colour.

To generate a Manufacturer Claim Report:

6. Go to Manufacturer > Mfr Claim Log
7. Select any claim row in the grid
8. Click the Manufacturer Claim Report button
9. The system assembles the report and opens it in your default PDF viewer
10. The PDF is also saved to C:\ProgramData\SolarWarrantyPro\ClaimReports\ with a filename like Claim_CLM-20260424-00005_for_EcoSun_Technologies.pdf

What's in the PDF:

- A branded header band in your dealership's primary brand colour, with company name, tagline, and the claim number
- Title "MANUFACTURER CLAIM REPORT" top-right
- Claim Details — dates, decision, resolution, warranty result, fault code, fraud flags, full description
- Customer Information — name, phones, email, address, region
- Product Information — manufacturer, serial number, batch, type/sub-type, model, power rating, invoice
- Installation Information — installer name, install date, location, warranty period, expiry
- Technician Inspection — technician name, inspection date, fault category, full diagnosis
- Evidence Photos — file count, folder path on disk, list of file names, with a note that photos must be attached separately when emailing the manufacturer
- Footer — generation timestamp, the username and role of the person who generated it, and your dealership's contact information

NOTE: Every Manufacturer Claim Report generation is recorded in the Audit Log as an EXPORT action against tblManufacturerClaims. This gives you a complete audit trail of which claims have been packaged for which manufacturer, by whom, and when.

WORKED EXAMPLE: Recording a Payment. Scenario: SunPower Corp has approved a claim and sent payment of 50,000 in local currency.

- Go to Manufacturer > Mfr Claim Log. Filter to SunPower Corp
- Find the Submitted claim row. Select it
- In the detail panel: enter the SunPower Reference No., set Status to Approved, enter Compensation Amount = 50000, set Payment Date to today
- Click Update Status
- Row turns green. The Recovery This Month dashboard tile increases by 50,000

EXERCISE — 6.1 Generate a Manufacturer Claim Report PDF: Scenario: You have an approved claim ready to submit to the manufacturer.

Steps to complete:

- Go to Manufacturer > Mfr Claim Log
- Filter to a specific manufacturer to find an approved claim
- Select the claim row
- Click the Manufacturer Claim Report button
- Wait for the PDF viewer to open
- Verify the header band is your dealership's brand colour, with company name and claim number
- Scroll through and verify all sections are populated: Claim, Customer, Product, Installation, Inspection, Evidence
- Note the file location — C:\ProgramData\SolarWarrantyPro\ClaimReports\
- Open Reports > Open Reports > Audit Log (if you have Admin access). Filter by tblManufacturerClaims. Verify a new EXPORT entry appears with the PDF filename.

Expected result: Manufacturer Claim Report PDF opens with brand-coloured header, all sections populated correctly, and a corresponding EXPORT entry in the Audit Log.

EXERCISE — 6.2 Work the Manufacturer Claim Log for Two Manufacturers: Scenario: Your trainer has created approved claims routed to two different manufacturers.

Steps to complete:

- Go to Manufacturer > Mfr Claim Log
- Use the Manufacturer filter to select Manufacturer A. Confirm only Manufacturer A claims appear
- Observe the Internal Claim Number column — every row should show a claim number in CLM-YYYYMMDD-XXXXX format
- Select the Pending claim. Click Mark as Submitted
- Change the Manufacturer filter to Manufacturer B. Select its Pending claim
- Enter a reference number, compensation amount, and payment date. Set status to Approved. Save
- Return to the dashboard. Note the Recovery This Month tile has updated
- Use the All Manufacturers filter to see both manufacturers' claims together

Expected result: Manufacturer A claim is Submitted. Manufacturer B claim is Approved with compensation recorded. Internal Claim Numbers are visible for all rows. Dashboard tile updated.

KNOWLEDGE CHECK: Answer without referring to the guide. Check answers with your trainer.

1. If a dealership stocks products from 3 manufacturers, how many separate claim logs are there?

Answer: _____

2. When does a manufacturer claim entry get created — does someone create it manually?

Answer: _____

3. What is the Internal Claim Number column and why is it useful?

Answer: _____

4. Where is the Manufacturer Claim Report PDF saved on disk?

Answer: _____

5. What colour is the header band on the Manufacturer Claim Report PDF? What controls it?

Answer: _____

6. How is a Manufacturer Claim Report PDF generation recorded in the Audit Log?

Answer: _____

7. A SunPower claim has been Submitted for 45 days with no response. What should you do?

Answer: _____

Unit 7 — Inventory Management

For Managers and Staff · Duration: 30 minutes

LEARNING OBJECTIVES — By the end of this unit you will be able to:

- Read the inventory screen and identify which manufacturer each stock line belongs to
- Filter the inventory view by manufacturer using the dropdown
- Issue a replacement unit and log a faulty return
- Mark faulty units as sent back to the manufacturer
- Recognise low stock alerts and understand how to reorder

7.1 Multi-Manufacturer Inventory

The Inventory screen shows replacement stock lines. Each row includes a Manufacturer column AND a Sub-Type column so you can see which manufacturer's stock is which and distinguish between, for example, "Battery — Li-Ion 24V" and "Battery — Lead-Acid 12V" within the same manufacturer. Rows highlighted in red are at or below the alert threshold for that model.

Counter	What It Tracks
In Stock	Units currently available to issue as replacements.
Pending Mfr Return	Faulty units returned by customers, sitting in your store awaiting return to the manufacturer.
Last Updated	When the stock level was last changed.

7.2 Filtering by Manufacturer

A Manufacturer filter dropdown at the top of the Inventory screen lets you narrow the grid to a single manufacturer at a time. Select All Manufacturers to see everything, or choose a specific manufacturer to focus on that stock.

This filter is particularly useful when:

- Reconciling stock with a specific manufacturer before a shipment
- Preparing to send faulty units back to one manufacturer
- Checking which lines are low on stock for a specific brand

7.3 Actions Available

Button	What it Does
Issue Replacement	Decreases stock by 1. Use when giving a replacement unit to a customer.
Log Return	Records a faulty unit returned by a customer. Increases Pending Mfr Return.
Sent to Mfr	Records that pending faulty units have been shipped back to the manufacturer. Decreases Pending count.
Adjust Stock	Admin only — manually adds or subtracts stock when a delivery arrives.

TIP: When you click Sent to Mfr, the system records that ALL pending units for that stock line have been sent to the manufacturer. Make sure the units have actually been packaged and shipped before clicking this.

EXERCISE — 7.1 Filter, Issue Replacement, and Log Return: Scenario: An approved claim requires a replacement. Practice the full stock movement cycle on a filtered view.

Steps to complete:

- Go to Inventory > View / Manage Stock
- From the Manufacturer dropdown at the top, select a specific manufacturer. Verify the grid filters to that manufacturer only
- Find the stock row for your product model. Note the current In Stock quantity. Note the Manufacturer and Sub-Type columns are visible.
- Select the row. Click Issue Replacement. Confirm the dialog. Verify In Stock decreased by 1
- Simulate a faulty unit return: select the same row, click Log Return. Confirm. Verify Pending Mfr Return increased by 1
- Click Sent to Mfr. Confirm. Verify Pending Mfr Return returned to 0
- Change the Manufacturer filter to All Manufacturers. Verify stock from other manufacturers is visible again

Expected result: Filter works correctly. Stock correctly decreased, return logged, and pending count cleared after marking sent to manufacturer. Manufacturer and Sub-Type columns visible throughout.

KNOWLEDGE CHECK: Answer without referring to the guide. Check answers with your trainer.

1. What does the Manufacturer column in the Inventory grid tell you?

Answer: _____

2. What does the Sub-Type column distinguish between?

Answer: _____

3. How do you show only one manufacturer's stock in the Inventory grid?

Answer: _____

4. What happens to the In Stock count when you click Issue Replacement?

Answer: _____

5. Which role is required to use Adjust Stock?

Answer: _____

6. Why should you only click Sent to Mfr when units have actually been shipped?

Answer: _____

Unit 8 — Customers, Installers & Technicians

For Staff and Above · Duration: 35 minutes

LEARNING OBJECTIVES — By the end of this unit you will be able to:

- Search for an existing customer by name or phone
- Add a new customer record
- Edit an existing customer record
- Add and manage Installer and Technician records
- Understand how Technician records link to user accounts
- Deactivate and reactivate Installers and Technicians

8.1 Managing Customers

Go to Customers > Manage Customers. The grid shows all customer records. Use the search box to filter by name or phone number.

Adding a New Customer

- Click Add New
- Enter Full Name (required), Primary Phone (required), and any other details
- Click Save

Editing a Customer

- Select the customer row in the grid
- Click Edit
- Make changes and click Save

TIP: You can also add a new customer directly from the Product Registration form without leaving that screen — click + New Customer in the customer search section.

8.2 Installers

Go to Customers > Manage Installers. Click Add New and enter the installer name, company, phone, and certification. Installers appear in the dropdown during product registration.

8.3 Technicians

Go to Customers > Manage Technicians. Click Add New and enter the technician name, phone, and specialisation. Technicians appear in the claim assignment dropdown during claim management.

How Technicians Link to User Accounts

Technicians need a user account with the Technician role to access the inspection form. SolarWarranty Pro simplifies this:

- When an administrator creates a user with the Technician role in Admin > User Management, a matching record is AUTOMATICALLY created in Customers > Manage Technicians and linked to the user account
- You do not need to manually create a technician record for someone who has been added as a Technician user — it is done for you

- Deactivating a Technician user account automatically removes them from the claim assignment dropdown, even if the underlying technician record is still active
- If you deactivate only the technician record but leave the user account active, the technician still disappears from the assignment dropdown
- When the system is about to create a Technician user, it checks for existing unlinked technician records by name; if one is found, you are prompted to link to the existing record rather than creating a duplicate

NOTE: This means there are two ways to stop assigning claims to a particular technician: deactivate their user account, OR deactivate their technician record. Either approach works. Use the one that matches your HR / IT processes.

8.4 Deactivating and Reactivating

Both the Installers and Technicians screens include a Show Inactive checkbox and an Activate / Deactivate button.

Action	How to do it	Effect
Deactivate	Select the active row. Click Deactivate. Confirm.	Marked inactive. Removed from dropdowns. Historical records preserved.
View Inactive	Tick the Show Inactive checkbox.	Inactive records appear alongside active ones (Active = False).
Reactivate	Select an inactive row. Click Activate. Confirm.	Record becomes active again and reappears in all dropdowns.

TIP: Use Deactivate rather than deleting. Deleting an installer or technician would break the historical links on every product or claim record they are associated with.

EXERCISE — 8.1 Add a Customer, Add a Technician User, and Verify the Link: Scenario: A new customer calls for the first time, and a new technician is joining.

Steps to complete:

- Go to Customers > Manage Customers. Click Add New. Enter: Full Name = Blessing Okonkwo, Phone 1 = 0701-234-5678, Region = Rivers State. Click Save. Verify the customer appears in the grid.
- Use the search box to search for 'Blessing'. Verify only Blessing appears.
- Log out and log in as Admin. Go to Admin > User Management. Click Add User. Create a user with Role = Technician, for example username adewale.ob, full name Adewale Obi.
- Tick 'Force user to change password at next login' (default). Set a temporary password meeting complexity rules. Save.
- Go to Customers > Manage Technicians. Verify that Adewale Obi appears in the technician grid automatically, linked to the user account.
- Log in as Manager. Go to Claims > Manage Claims. Open the assignment dropdown. Verify Adewale appears as an assignable technician.

Expected result: Customer added and searchable. Technician user account created. Matching technician record auto-linked. Technician visible in claim assignment dropdown.

KNOWLEDGE CHECK: Answer without referring to the guide. Check answers with your trainer.

1. Can you register a product for a customer who is not yet in the system?

Answer: _____

2. What two fields are required when adding a new customer?

Answer: _____

3. When you create a user with the Technician role, what happens in Customers > Manage Technicians?

Answer: _____

4. If you deactivate a Technician user account, does the technician still appear in the claim assignment dropdown?

Answer: _____

5. What does the system do if you try to create a Technician user whose name matches an existing unlinked technician record?

Answer: _____

Unit 9 — Technician Inspection

For Field Technicians · Duration: 45 minutes

LEARNING OBJECTIVES — By the end of this unit you will be able to:

- Access and view your assigned claims
- Complete the product-specific void trigger checklist accurately
- Use the live Warranty Result preview to see the impact of your observations
- Upload photographic evidence
- Write a detailed, professional technical diagnosis
- Submit the completed inspection

9.1 Your Role

As a field technician, your inspection report is the evidence on which the manager bases their decision. Your accuracy and thoroughness directly determines whether legitimate customers get supported and whether fraudulent claims are caught.

POLICY: Your inspection report is a legal document in the warranty process. Inaccurate or incomplete reports can result in fraudulent claims being approved or legitimate claims being rejected. Take your time and be thorough.

9.2 Accessing Your Claims

Log in with your Technician account. On your first login you will be required to change your password — see Unit 14. Once logged in, go to Claims > My Inspections. This screen shows only claims assigned to you — you cannot see other technicians' claims. The claim list shows the claim number (in CLM-YYYYMMDD-XXXXX format), serial number, product type, and manufacturer name.

9.3 The Void Trigger Checklist

The checklist is product-specific — Inverter, Battery, and Panel each have their own set of void trigger conditions configured by the Administrator. These conditions are also manufacturer-specific, so the checklist may differ between manufacturers. Work through every item honestly based on what you observe on-site.

Checklist Item	What to Look For
Physical damage visible?	Cracked casing, bent frame, broken screen, burn marks, dents, visible impacts.
Signs of overloading? (Inverter)	Connected loads exceed rated kW, tripped breakers, customer admits heavy usage.
Depth of discharge? (Battery)	Check BMS logs. Ask about usage habits. DoD > 80% typically voids warranty.
Unauthorised modifications?	Any wiring not done by a certified installer, added components, tampered connections.
Surge or lightning damage?	Burn marks at connection points, blown fuses, customer reports storm, no

	surge protector.
Moisture or water ingress?	Rust inside unit, watermarks, condensation, unit not weatherproofed correctly.
Fault reproduced on-site?	Can you demonstrate the fault is real and consistent?

TIP: Tick ONLY what you personally observed or confirmed on-site. Do not tick items based solely on what the customer says without your own verification.

9.4 Live Warranty Result Preview (NEW v2.1)

NEW IN v2.1: New live preview. At the bottom of the inspection form there is a Warranty Result preview label. As you tick or untick checklist items, the preview updates in real time to show what the warranty result will be when you submit — Valid, Void, or whatever combination applies. This lets you see the impact of each observation before submitting.

Using the preview:

- When all checklist items are clear, the preview shows “Warranty Result: VALID” in green
- When you tick a void trigger (e.g. Physical damage visible), the preview switches to “Warranty Result: VOID — Physical damage visible” in red
- Untick the item and the preview returns to VALID
- Use this to double-check your conclusions before clicking Submit Inspection

9.5 Writing a Professional Diagnosis

Minimum 50 characters. A good diagnosis answers:

- What did you observe when you arrived?
- What tests did you perform (multimeter, load test, visual inspection)?
- What is the most probable root cause?
- Is this attributable to manufacturing or to customer misuse?
- What do you recommend — repair, replace, or reject?

Poor	Professional
“Unit is broken. MPPT fault. Replace it.” No observations, no test results, no root cause analysis.	“Visited 10/04/2026. Unit not outputting power, display blank. DC input from panels = 380V (normal). Inverter output = 0V. No external damage, surge protector fitted, no unauthorised modifications, customer load within rated 5kW. PCB shows burnt MPPT component. Diagnosis: MPPT failure — manufacturing defect. Recommend replacement.”

EXERCISE — 9.1 Complete a Full Inspection Using the Warranty Preview: Scenario: Your trainer will assign you a test claim. Complete the full inspection process while watching the live Warranty Result preview.

Steps to complete:

- Log in with Technician credentials (complete the force password change if this is your first login)
- Go to Claims > My Inspections

- Select your assigned claim. Note the claim number, product type, and manufacturer name shown
- Note the Warranty Result preview at the bottom of the form. With nothing ticked, it should show VALID
- Tick "Physical damage visible?" Verify the preview switches to VOID
- Untick it. Verify the preview returns to VALID
- Work through the rest of the checklist using the scenario your trainer provides
- Select the Fault Category matching the scenario
- Set the inspection date to today
- Upload at least 1 test photo
- Write a diagnosis of at least 80 characters using the scenario details
- Watch the preview during the whole process to confirm your final state matches what you intend to submit
- Click Submit Inspection. Note the warranty result shown in the success message

Expected result: Inspection submitted. Live preview correctly reflected your ticks and unticks throughout. Claim status changed to Inspected. Your name appears as inspector in the claim record.

KNOWLEDGE CHECK: Answer without referring to the guide. Check answers with your trainer.

1. Can a Technician see claims assigned to other technicians?

Answer: _____

2. If the checklist for a SunPower Inverter differs from an EcoSun Inverter checklist, what does that tell you about how void reasons are configured?

Answer: _____

3. What does the live Warranty Result preview show, and when does it update?

Answer: _____

4. A customer tells you a power surge happened but you see no burn marks or blown fuses. Do you tick "Surge damage" on the checklist?

Answer: _____

5. What status does the claim move to after you submit your inspection?

Answer: _____

Unit 10 — Administration

For Administrators · Duration: 60 minutes

LEARNING OBJECTIVES — By the end of this unit you will be able to:

- Create, enable, disable, and reset passwords for user accounts
- Apply Force Password Change correctly for new users and admin resets
- Understand the four user roles and their access levels
- Customise which menu items each non-Admin role can access (Role Permissions)
- Resolve escalated claims
- Configure dealer branding, currency, and company details
- Manage warranty void reasons

10.1 User Management

Creating a New User

- Go to Admin > User Management
- Click Add User
- Enter Username (use a consistent format e.g. firstname.lastname), Full Name, Role, and Password
- Note that the “Force user to change password at next login” checkbox is ticked by default — leave it ticked
- Click Save. Communicate the temporary password to the user verbally — never by email
- On their first login, they will be REQUIRED to change the password you set — see Unit 14

NOTE: If you create a user with the Technician role, a matching record is automatically created in Customers > Manage Technicians and linked to the user account. You do not need to create the technician record separately — see Unit 8 for details.

Resetting a User’s Password

If a user forgets their password, go to Admin > User Management. Select the user and click Reset Password (or use the Edit form). Set a temporary password meeting the complexity rules. Give the user this temporary password through a secure channel.

When you save, the user’s Force Password Change flag is automatically set to True — they will be REQUIRED to change the password you set on their very next login. This ensures that admin-assigned temporary passwords are never retained.

Password Complexity Rules

- At least 8 characters long
- At least one uppercase letter (A-Z)
- At least one lowercase letter (a-z)
- At least one digit (0-9)

Role Assignment Guide

Role	Assign To
Admin	IT administrator or most senior manager. Maximum 2 accounts recommended. Admin is the

	only role that can resolve Escalated claims.
Manager	Branch managers, senior operations staff who approve, reject, and escalate claims.
Staff	Customer service, sales staff — anyone who registers products or submits claims.
Technician	Field engineers who do on-site inspections. Can only see My Inspections. Matching technician record is auto-created.

Toggling Users Active / Inactive

Use the Toggle Active button to deactivate a user without deleting them. Inactive users cannot log in. Their historical records (registrations, claims, inspections, audit entries) are preserved.

10.2 Resolving Escalated Claims (Admin Only)

NEW IN v2.1: Admin-only workflow. Only an Admin can resolve a claim that a Manager has escalated. This deliberate separation ensures borderline decisions get senior review.

To resolve an escalated claim:

11. Log in as Admin and go to Claims > Manage Claims
12. Filter by Escalated status to see claims awaiting your attention
13. Select an Escalated claim. Read the EscalatedBy, EscalatedDate, and EscalationReason in the decision panel
14. Read the technician's diagnosis and the warranty status
15. Choose Approve or Reject (Escalate is disabled — you cannot re-escalate an already-escalated claim)
16. Select a Resolution if approving (Repair or Replace)
17. Click Save Decision. The claim moves to Approved or Rejected. The escalation history is preserved alongside the final decision.

NOTE: When you Approve an escalated claim with either Repair or Replace, a manufacturer claim entry is auto-created exactly as it would be for a normal Approve. The escalation does not change this behaviour.

10.3 Dealer / Branding Setup

Go to Admin > Dealer / Branding Setup to configure:

- Company Name and Tagline (appear on the login screen, headers, and the Manufacturer Claim Report PDF header)
- Company Address, Phone, Email, Website
- Currency Symbol and ISO code
- Primary brand colour (hex code)
- Date format and locale code

NOTE: The brand colour set here is propagated consistently across the whole application: menu bar, status bar, dashboard title, all form headers, primary buttons, grid column headers, and the Manufacturer Claim Report PDF header band. Set this once and your branding is consistent everywhere.

10.4 Role Permissions

SolarWarranty Pro ships with sensible defaults for what each non-Admin role (Manager, Staff, Technician) can see and do. Those defaults work for most dealerships. The Role Permissions screen at Admin > Role Permissions lets you customise them when the defaults don't match how your dealership divides work.

The three editable roles

Role Permissions controls three roles: Manager, Staff, and Technician. The Admin role is not shown on this screen — Admin always has full access to every menu item and cannot have any permission revoked.

What the defaults look like

Role	What they can access by default
Manager	Everything except the Admin menu. Includes Register New Product, Search / View Products, Bulk Import Products, Submit New Claim, Manage Claims (including Escalate), My Inspections, Mfr Claim Log (including Manufacturer Claim Report PDF), View / Manage Stock, Open Reports, Manage Customers, Manage Installers, Manage Technicians.
Staff	Register New Product, Search / View Products, Submit New Claim, Manage Claims, View / Manage Stock, Manage Customers, Manage Installers, Manage Technicians, AND Reports > Open Reports (with the Staff-appropriate reports: Open Claims Ageing, Warranty Expiry Forecast, Current Stock Levels, Warranty Certificates). Deliberately excluded: Bulk Import, My Inspections, Mfr Claim Log, and all Admin items.
Technician	Only My Inspections.

Changing a permission

Each cell in the Role Permissions grid is a checkbox. Ticking grants access, unticking revokes. Click Save Changes when you are done. The screen will confirm that the changes have been saved and remind you that they take effect on each user's next login.

IMPORTANT: Permission changes do not affect users who are currently logged in. If Grace is working when you change Staff's access, her menu bar continues to show the old permissions until she logs out and back in. If a change must take effect immediately, ask the affected user to log out and log in again.

Resetting to defaults

If you want to undo all your customisations and return to the shipped defaults, click the Reset to Defaults button at the bottom left. You will be asked to confirm. After confirming, the grid repopulates with the same three-role defaults listed above.

Audit trail

Every permission change is recorded in the Audit Log. To review who changed what and when, open Reports > Open Reports > Audit Log and filter by Table = tblMenuPermissions. Saving the Role Permissions screen when no checkbox was changed does NOT produce audit entries — only actual changes are logged.

EXERCISE — 10.1 Create a User, Reset Password, and Update Branding: Scenario: A new staff member Grace Nwosu is joining. Also update the company tagline.

Steps to complete:

- Go to Admin > User Management. Click Add User. Username: grace.nwosu. Full Name: Grace Nwosu. Role: Staff. Password: Welcome@1 (meets complexity rules)
- Confirm 'Force user to change password at next login' is ticked. Save
- Verify Grace appears in the grid with Active = True
- Log out. Log in as grace.nwosu / Welcome@1
- Verify the Force Password Change dialog appears automatically. Set a new password (e.g. GraceWork9)
- Verify you are taken to the main application
- Log out. Log back in as admin
- Go to Admin > Dealer / Branding Setup. Change the Company Tagline. Save. Log out and back in. Verify the new tagline appears on the login screen

Expected result: Grace's account created. Force password change triggered on her first login. Tagline change visible on login screen.

EXERCISE — 10.2 Resolve an Escalated Claim: Scenario: Your trainer has prepared an escalated claim for you to resolve.

Steps to complete:

- Log in as Admin. Go to Claims > Manage Claims
- Filter by status Escalated
- Select an escalated claim. Read the EscalatedBy, EscalatedDate, and EscalationReason in the decision panel.
- Read the technician's diagnosis. Note the manufacturer.
- Verify Escalate radio is DISABLED. Verify Approve and Reject are available.
- Choose Approve. Choose Resolution = Replace. Click Save Decision.
- Verify the claim status changes from Escalated to Approved.
- Go to Manufacturer > Mfr Claim Log. Filter to the manufacturer of the claim. Verify a new manufacturer claim entry has been auto-created.
- Go to Reports > Open Reports > Audit Log. Verify there are TWO entries for this claim: an ESCALATE entry from the Manager, and an UPDATE entry from your resolution.

Expected result: Escalated claim resolved by Admin. Manufacturer claim auto-created. Audit log shows both the original escalation and the final resolution.

KNOWLEDGE CHECK: Answer without referring to the guide. Check answers with your trainer.

1. What is the recommended maximum number of Admin accounts?

Answer: _____

2. When you create a new user, what is the default state of the 'Force user to change password' checkbox?

Answer: _____

3. When you reset a user's password, does the Force Password Change flag automatically get set?

Answer: _____

4. Which role is required to resolve an escalated claim, and why?

Answer: _____

5. Can an Admin re-escalate an already-escalated claim?

Answer: _____

6. On the Role Permissions screen, which role is NOT shown as a column, and why?

Answer: _____

7. An admin changes Manager's access to Reports. A Manager is currently logged in. When will the change take effect for that Manager?

Answer: _____

8. What does the Reset to Defaults button do on the Role Permissions screen?

Answer: _____

9. Where can you verify after the fact that a permission change was saved — and who made it, when?

Answer: _____

Unit 11 — Manufacturers & Warranty Settings

For Administrators · Duration: 35 minutes

LEARNING OBJECTIVES — By the end of this unit you will be able to:

- Add, edit, and deactivate manufacturer records
- Understand what is seeded automatically when a manufacturer is added
- Configure warranty periods per manufacturer per product type
- Explain what changes and what does NOT change when a warranty period is updated

11.1 Why This Unit Is Critical

Everything in SolarWarranty Pro that is manufacturer-specific flows from the manufacturer records configured here: warranty periods, void reasons, claim logs, and inventory lines.

11.2 Manage Manufacturers

Go to Admin > Manage Manufacturers. The left panel lists all manufacturers. The right panel shows the selected manufacturer's details.

Adding a New Manufacturer

- Click New in the right panel
- Enter the Manufacturer Name (required), Website URL, Contact Name, Email, Phone, and Address
- Click Save
- The system automatically seeds default warranty periods (Inverter 24m, Battery 60m, Panel 120m) AND default void reasons for this manufacturer
- Go to Admin > Warranty Period Settings and adjust the periods to match this manufacturer's actual terms

POLICY: Add all manufacturers before staff begin registering products. Products registered under an inactive or missing manufacturer will not route claims correctly.

Deactivating a Manufacturer

If you stop carrying a manufacturer's products, select them and click Toggle Active. Inactive manufacturers do not appear in the dropdown during product registration. Existing registered products and claims are not affected.

11.3 Warranty Period Settings

Go to Admin > Warranty Period Settings. Select a manufacturer from the dropdown at the top. The three product type settings (Inverter, Battery, Panel) for that manufacturer are shown.

How It Works

- Each manufacturer has completely independent warranty periods
- SunPower Inverter can be 24 months while EcoSun Inverter is 36 months — configured separately
- The live preview label shows the year equivalent as you adjust (e.g. 18 months = 1 yr 6 mo)
- Click Save to apply. Click Reset to Defaults to restore 24/60/120 months for this manufacturer

IMPORTANT: Changing a warranty period only affects NEW registrations from that point forward. Products

already registered keep the expiry date calculated at the time of their registration. Existing records are never retroactively changed.

WORKED EXAMPLE: Updating a Warranty Period. Scenario: EcoSun Technologies has extended their battery warranty from 60 to 72 months per a new contract.

- Go to Admin > Warranty Period Settings
- Select EcoSun Technologies from the manufacturer dropdown
- In the Battery group, change the spinner from 60 to 72. Preview shows = 6 years
- Click Save. Confirm the success message shows Battery: 72 months
- All new EcoSun Battery registrations now receive 72 months from their install date
- Existing EcoSun batteries already registered are unaffected — they keep their original 60-month expiry

EXERCISE — 11.1 Add a Manufacturer and Configure Warranty Periods: Scenario: Your trainer will ask you to add a new manufacturer and set non-default warranty periods.

Steps to complete:

- Go to Admin > Manage Manufacturers. Click New
- Enter the manufacturer details your trainer provides. Click Save
- Observe the confirmation that default warranty settings were seeded
- Go to Admin > Warranty Period Settings. Select your new manufacturer
- Verify it shows the default 24/60/120 months
- Change the Inverter period to the value your trainer specifies. Click Save
- Go to Products > Register New Product. Select your new manufacturer. Select Product Type = Inverter. Verify the warranty months shown match what you just configured
- Close without saving

Expected result: New manufacturer added. Warranty setting changed and saved. Product registration form shows the correct custom period for this manufacturer's Inverter.

KNOWLEDGE CHECK: Answer without referring to the guide. Check answers with your trainer.

1. When you add a new manufacturer, what two things are seeded automatically?

Answer: _____

2. A customer bought a battery from EcoSun on 01 January 2026 (60-month warranty). On 01 April 2026 you change EcoSun's battery period to 72 months. When does the January 2026 customer's warranty expire?

Answer: _____

3. How do you stop a manufacturer from appearing in the Product Registration dropdown without deleting their records?

Answer: _____

4. Can two manufacturers have different warranty periods for the same product type?

Answer: _____

5. Where do you go to change the void reasons checklist for a specific manufacturer?

Answer: _____

Unit 12 — Reports

For Staff, Managers & Administrators · Duration: 30 minutes

LEARNING OBJECTIVES — By the end of this unit you will be able to:

- Navigate to the Reports screen and identify reports available for your role
- Run and interpret the 8 standard reports
- Print a branded warranty certificate for a customer including the registration footer
- Use the Audit Log and User Activity reports to monitor system usage (Admin)

12.1 Accessing Reports

Go to Reports > Open Reports in the menu bar. The Reports screen opens maximised. The green sidebar lists all reports available to your role. Click any report name to load it in the content area.

Report	Access	Description
1. Open Claims Ageing	Staff+	All open claims, oldest first. Rows turn amber after 7 days and red after 14 days. TechnicianName correctly resolved for assigned claims.
2. Recovery Summary	Manager +	Compensation claimed vs received per manufacturer for a selected date range.
3. Warranty Expiry Forecast	Staff+	Products expiring within 30, 60, 90, or 180 days. Includes customer phone for outreach.
4. Current Stock Levels	Staff+	All inventory lines. Rows below the low stock threshold are highlighted red.
5. Claims by Status	Manager +	Summary count per status plus full claim detail list for a date range.
6. Warranty Certificates	Staff+	Search by serial number to generate and print a branded warranty certificate. Footer includes the registration date and the username who registered the product.
7. Audit Log	Admin only	Full audit trail of all system operations, filterable by user, date, and table.
8. User Activity	Admin only	Products registered, claims submitted, and inspections completed per user.

NOTE: Reports menu access for Staff. Staff users now see the Reports menu in the menu bar with Reports 1, 3, 4, and 6 visible in the sidebar. Reports 2, 5, 7, and 8 require Manager or Admin and are not shown to Staff. This default can be customised via Admin > Role Permissions if your dealership wants to grant or revoke specific reports for any role.

12.2 Warranty Certificates

Warranty Certificates are one of the most-used reports for customer-facing purposes. The certificate is generated from live data and uses your company branding.

- Go to Reports > Open Reports > Warranty Certificates

- Type the customer's product serial number in the search box. Click Search
- The certificate renders on screen. Review all details — manufacturer, model, serial, warranty dates, customer, installer, and the registration footer
- The footer shows who registered the product and when — use this to verify the registration was performed by the correct staff member
- Click Print / Preview to open the Windows print preview dialog. Print directly or save as PDF

TIP: The company name, tagline, and address on the certificate come from Admin > Dealer / Branding Setup. Make sure these are up to date before printing certificates for customers.

12.3 Open Claims Ageing — Reading the Colours

Colour	Meaning
No highlight	Claim submitted within the last 7 days — within normal processing time.
Amber	Claim is 8–14 days old and unresolved — review and take action.
Red	Claim is more than 14 days old — urgent action required.

12.4 Audit Log (Admin Only)

The Audit Log is a complete, tamper-proof record of every action performed in the system. It cannot be edited or deleted. The action types include INSERT, UPDATE, ESCALATE (Manager escalations), and EXPORT (Manufacturer Claim Report PDF generations). Use it to:

- Investigate a disputed change — find who changed a record and when
- Check for unusual activity — filter by user to see all their actions
- Verify Manufacturer Claim Report generation — filter by Table = tblManufacturerClaims and look for EXPORT entries with the PDF filename
- Verify role permission changes — filter by Table = tblMenuPermissions

IMPORTANT: The Audit Log records the old and new values for every UPDATE. If a compensation amount was changed incorrectly, you can see both the original and the new value in the OldValues and NewValues columns. Password fields are always masked as PasswordHash=*** for security.

EXERCISE — 12.1 Run the Key Reports: Scenario: Practice running the most important reports for your role.

Steps to complete:

- Go to Reports > Open Reports. Click Report 1 (Open Claims Ageing). Click Refresh. Note how many open claims exist
- Click Report 3 (Warranty Expiry Forecast). Select 60 days. Click Run.
- Click Report 6 (Warranty Certificates). Search for a serial number from a product you registered earlier. Verify the footer.
- If Admin: click Report 7 (Audit Log). Set date range to today. Run. Verify your own actions appear, including any Manufacturer Claim Report EXPORT entries.

- If Admin: click Report 8 (User Activity). Run for this month.

Expected result: All reports run without error. Certificate renders correctly with visible registration footer. Audit log shows today's activity including any EXPORT entries from Manufacturer Claim Report PDFs.

KNOWLEDGE CHECK: Answer without referring to the guide. Check answers with your trainer.

1. Which report would you use to identify claims that have been waiting more than 2 weeks for action?

Answer: _____

2. A customer asks for a copy of their warranty. What report do you use and what information appears in the certificate footer?

Answer: _____

3. A manager wants to know how much compensation SunPower Corp owes the dealership this quarter. Which report shows this?

Answer: _____

4. Which two reports are visible to Admin only and why?

Answer: _____

5. In the Audit Log, what action type appears when someone generates a Manufacturer Claim Report PDF?

Answer: _____

Unit 13 — Bulk Product Import

For Managers & Administrators · Duration: 40 minutes

LEARNING OBJECTIVES — By the end of this unit you will be able to:

- Explain when to use Bulk Import instead of manual registration
- Download and correctly fill in the import template
- Recognise the Excel xlsx leading-zero phone warning
- Validate a file and interpret the validation results
- Understand how customers and installers are resolved during import
- Execute a bulk import and verify the results
- Export and interpret the import error report

13.1 When to Use Bulk Import

Bulk Import is designed for large installers who need to register hundreds or thousands of products from a single installation job. Instead of entering each product one at a time through the Product Registration form, they prepare a spreadsheet and upload it in one operation.

13.2 The Import Template

Go to Products > Bulk Import Products. Click Download Template to get the CSV template. Open it in Excel or a text editor.

IMPORTANT: Delete the comment rows (lines starting with #) and the example data row before saving. Leave only the header row and your data rows.

NOTE: Excel (.xlsx) files are fully supported for bulk import on both Access and SQL Server deployments. The file is parsed internally by SolarWarranty Pro — no separate tools or drivers are required on the workstation. However, see §13.3 below about Excel's leading-zero behaviour on phone numbers.

13.3 Excel xlsx Leading-Zero Warning (NEW v2.1)

NEW IN v2.1: Excel may strip leading zeros from phone numbers. When you save a Nigerian phone number like "0803999888" in a .xlsx file, Excel may treat it as a number, drop the leading 0, and save it as "803999888". SolarWarranty Pro v2.1 detects this during validation and warns you.

How the detection works:

- When the source file is .xlsx (or .xls) AND the CustomerPhone is exactly 10 numeric digits without a leading 0, the row is flagged as a Warning
- The message reads: "Phone '<value>' is 10 digits without leading 0. Excel may have stripped it. Verify source data."
- CSV imports do not trigger this warning — CSV is plain text and your typed value is treated as authoritative
- A Warning does NOT block the import; the row will still be processed. But it is a strong signal to check the source data before clicking Import Products

TIP: Two ways to avoid this issue: (1) prefer .csv format — Excel saves CSV as plain text and preserves your leading zeros, OR (2) format the phone column as Text in Excel BEFORE entering the data (Home > Number Format > Text). The Bulk Import template CSV header now includes a # comment block warning users about this Excel behaviour.

13.4 The Three-Stage Workflow

Bulk Import works in three stages. You cannot skip a stage.

Stage	Action	What Happens
1	Validate File	Every row is checked for errors. Nothing is written to the database. Fix errors and re-validate until 0 errors remain.
2	Import Products	All rows inserted in a single transaction. If anything fails, the entire batch rolls back.
3	Export Report	Save a CSV showing the status of every row. Share with the installer to confirm what was registered.

13.5 Reading the Validation Results

Colour	Status	Meaning
Green	Valid	Row will import cleanly.
Amber	Warning	Will import, but something is missing or suspicious (e.g. installer not found, or .xlsx phone with no leading 0). Review the Messages column.
Red	Error	Will NOT import. The issue must be fixed in the file before import can proceed.

POLICY: Import is blocked if ANY row has Error status. Every single error must be resolved before the Import button becomes enabled. Warnings (including the xlsx leading-zero warning) do NOT block the import.

EXERCISE — 13.1 Run a Full Bulk Import with the xlsx Phone Warning: Scenario: Your trainer will provide two test files: a .csv and a .xlsx, each with a phone number that has a leading zero.

Steps to complete:

- Go to Products > Bulk Import Products
- Click Download Template. Examine the comment header — verify it includes the Excel leading-zero warning.
- Browse for the .csv file. Click Validate. Verify all rows are Valid (no leading-zero warnings on CSV).
- Now browse for the .xlsx file. Click Validate. Verify the system flags rows where Excel may have stripped a leading zero, with status = Warning and the explanatory message in the Messages column.
- Cancel the .xlsx import. Open the file in Excel. Format the phone column as Text. Re-enter the original “0803999888” values to restore the leading zero.
- Save and re-validate. Verify the warnings are gone.
- Click Import Products. Verify the products are registered with the correct (leading-zero) phone numbers.

Expected result: CSV imports cleanly. xlsx import flags the leading-zero issue clearly. After fixing the source file, the warnings disappear and the import succeeds with correct phone numbers.

KNOWLEDGE CHECK: Answer without referring to the guide. Check answers with your trainer.

1. What is the minimum number of rows that must have Error status before the Import button is enabled?

Answer: _____

2. A row in a .xlsx file shows the warning "Phone '3999888' is 10 digits without leading 0. Excel may have stripped it." What does this mean and what should you do?

Answer: _____

3. A row has InstallerPhone filled in but no matching installer is found. Is this an error or a warning? Will the product import?

Answer: _____

4. When you bulk import 20 products, whose username is recorded as the registering user for each?

Answer: _____

5. The import button is clicked and row 7 causes a database error. What happens to rows 1-6 that already imported successfully?

Answer: _____

Unit 14 — Password Management

For All Roles · Duration: 20 minutes

LEARNING OBJECTIVES — By the end of this unit you will be able to:

- State the password complexity rules that apply to every password in SolarWarranty Pro
- Complete the Force Password Change dialog on your first login
- Understand what happens when an administrator resets your password
- Know what to do if you forget your password
- For administrators: reset another user's password correctly

14.1 Password Complexity Rules

Every password you set in SolarWarranty Pro must meet all of the following rules:

- At least 8 characters long
- At least one uppercase letter (A-Z)
- At least one lowercase letter (a-z)
- At least one digit (0-9)

For self-service password changes, your new password must ALSO be different from your current password.

14.2 Force Password Change on First Login

The first time you log in with a newly created account (or after an admin resets your password), you will be required to change your password immediately. The Change Password dialog appears automatically and blocks access to the application until you complete the change.

IMPORTANT: If you cancel the Change Password dialog, a confirmation prompt warns you that cancelling will log you out. If you confirm, you are returned to the login screen with the message "Password change is required to continue."

14.3 Admin-Initiated Password Resets

When an administrator resets your password, the force-change flag is automatically applied to your account. The next time you log in with the admin-assigned temporary password, the Change Password dialog appears and you must choose your own password.

14.4 If You Forget Your Password

Contact an Administrator. They can reset it via Admin > User Management > Reset Password.

POLICY: Do NOT ask another staff member or colleague to share their password. Passwords should only be communicated verbally, in person, or via a secure messaging channel approved by your organisation.

14.5 For Administrators — Resetting Another User's Password

- Go to Admin > User Management. Select the user and click Reset Password (or Edit and enter a new password)
- Set a temporary password meeting the complexity rules

- The 'Force user to change password at next login' checkbox automatically ticks when you enter a new password — leave it ticked
- Save
- Communicate the temporary password to the user through a secure channel (in person or verbal)
- On the user's next login, the force-change flow takes over and they will set their own password

EXERCISE — 14.1 Force Password Change End-to-End: Scenario: Practice the full flow: admin creates a user with a temporary password, user logs in and completes the force-change.

Steps to complete:

- Log in as Admin
- Go to Admin > User Management. Click Add User. Username trainee.test, role Staff. Enter a temporary password meeting complexity rules, for example Training9
- Confirm 'Force user to change password at next login' is ticked. Save
- Log out
- Log in as trainee.test with password Training9
- When the Change Password dialog appears, try an invalid password (e.g. 'short' — too short). Verify the error message
- Try another invalid password (e.g. 'password1' — no uppercase). Verify the error
- Try a valid new password (e.g. Trainee7). Complete the change
- Verify you are taken to the main application
- Log out. Log in again as trainee.test with Trainee7. Verify no force-change dialog appears

Expected result: Test user created with force-change flag. Complexity rules enforce specific error messages for each violation. Successful change clears the flag. Subsequent logins go directly to the main app.

KNOWLEDGE CHECK: Answer without referring to the guide. Check answers with your trainer.

1. State all four password complexity rules enforced by SolarWarranty Pro.

Answer: _____

2. What appears on screen immediately after your first successful login, and what happens if you cancel it?

Answer: _____

3. When an admin resets your password, will you be asked to change it on your next login? Why?

Answer: _____

4. What do you do if you forget your password?

Answer: _____

END OF TRAINING MANUAL

Congratulations on completing the SolarWarranty Pro v2.3 Training Programme.

SolarWarranty Pro · Multi-Manufacturer Edition · Version 2.1

Computer Aided Business Systems, Lagos, Nigeria

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