PARADIN ENVIROTECH

Software Requirements Specification

ShieldCert System - Warehouse Management Module

Version: 1.0

Date: 2025-12-22

Status: Draft

https://www.securewithpaladin.com

Table of Contents

1 Document Information

Field	Value
Project Name	ShieldCert System - Warehouse Management Module
Version	1.0
Date	2025-12-22
Project Manager	TBD
Tech Lead	TBD
Qa Lead	TBD
Platforms	['Web']
Document Status	Draft
Client	Paladin Envirotech
Document Code	SHIELDCERT-WAREHOUSE-122025

2 Project Overview

2.1 What Are We Building

2.1.1 System Function

Organization, warehouse, and location hierarchy management system that provides the foundational structure for asset tracking, processing stage management, and operational workflow organization.

2.1.2 Users

- Administrators: Organization and warehouse setup
- Warehouse Managers: Location and processing stage management
- Operations Staff: Location-based asset tracking and movement
- All Users: Location selection for asset placement and tracking

2.1.3 Problem Solved

Provides structured organizational hierarchy, enables location-based asset tracking, supports processing stage workflow management, and ensures consistent location data across all operational modules.

2.1.4 Key Success Metric

100% location-based asset tracking, clear processing stage workflow, and hierarchical organization structure supporting all operations.

2.2 Scope

2.2.1 In Scope

- Organization management and hierarchy
- Warehouse creation and configuration
- Location and sub-location management
- Processing stage assignment and tracking
- Pallet management and location tracking
- Location-based permissions and access control

2.2.2 Out Of Scope

- Physical warehouse layout optimization

- Automated location assignment algorithms

- Integration with warehouse management hardware

- Advanced space utilization analytics

3 User Requirements

3.1 Organization Management

Feature Code	I Want To	So That I Can	Priority	Notes
FT-ORG-MANAGE	Create and manage organizations with location details	Establish the top-level organizational structure	Must	Organization name, location, and main address

3.2 Warehouse Management

Feature Code	I Want To	So That I Can	Priority	Notes
FT-WAREHOUSE-MANAGE	Create and manage warehouses within organizations	Define operational facilities and their configurations	Must	Warehouse details, manager assignment, and operational settings

3.3 Location Management

Feature Code	I Want To	So That I Can	Priority	Notes
FT-LOCATION-MANAGE	Create and manage locations with processing stages	Track assets through operational workflow stages	Must	Hierarchical locations with processing stage inheritance

4 Data Model

4.1 Entities

4.1.1 Organization

4.1.1.1 Description

Top-level organizational structure

4.1.1.2 Key Fields

- organization_id (Primary Key)
- organization_name (Required)
- organization_location
- main_address
- created_date
- status (Active/Inactive)

4.1.2 Warehouse

4.1.2.1 Description

Operational facilities within organizations

4.1.2.2 Key Fields

- warehouse_id (Primary Key)
- organization_id (Foreign Key)
- warehouse_name (Required)
- warehouse_short_name
- warehouse_address
- warehouse_manager_id (Foreign Key)
- weight_unit_of_measure
- time_date_format
- status (Active/Inactive)

4.1.3 Location

4.1.3.1 Description

Asset storage and processing locations

4.1.3.2 Key Fields

- location_id (Primary Key)
- warehouse_id (Foreign Key)
- parent_location_id (Foreign Key)
- location_name (Required, Unique within warehouse)
- processing_stage (Inbound, Triage, Tech, Dismantle, Finished Goods)
- status (Active/Inactive)

5 Business Rules

- Organizations can have multiple warehouses

- Warehouses must be linked to parent organization

- Location names must be unique within warehouse

- Sub-locations inherit processing stage from parent

- Processing stages define workflow progression

- Proper permissions required for creation/editing

6 Sign Off

6.1 Approval

Role	Name	Signature	Date

6.2 Document History

Version	Date	Changes Made	Changed By
1.0	2025-12-22	Initial Warehouse Management module SRS	SRS Development Team