



PARADIN ENVIROTECH

Software Requirements Specification

ShieldCert System - Model Management Module

Version: 1.0

Date: 2025-12-22

Status: Draft

<https://www.securewithpaladin.com>

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1 Document Information

| Field | Value |
|-----------------|---|
| Project Name | ShieldCert System - Model 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-MODEL-122025 |

2 Project Overview

2.1 What Are We Building

2.1.1 System Function

Product catalog management system that handles model number creation, approval workflow, product classification, and substitute model management for IT assets throughout the ITAD process.

2.1.2 Users

- Model Management Team: Model approval and catalog maintenance
- Operations Staff: Model creation during asset processing
- Auditing Operators: Model selection during asset data capture
- Value Recovery Team: Model information for pricing and sales

2.1.3 Problem Solved

Eliminates inconsistent product identification, ensures standardized model catalog, automates approval workflow, provides substitute model handling for rejected items, and maintains accurate product specifications for valuation and processing.

2.1.4 Key Success Metric

100% standardized product identification, 95% model approval efficiency, zero duplicate models, and automated substitute model replacement.

2.2 Scope

2.2.1 In Scope

- Model number creation and approval workflow
- Product type and manufacturer association
- Image upload and management
- Model search and filtering capabilities
- Rejected model substitution process

- Weight and description management
- Tech line classification for processing decisions

2.2.2 Out Of Scope

- Automated model recognition from images
- Integration with manufacturer databases
- Advanced product specifications management
- Pricing optimization based on model data



3 User Requirements

3.1 Model Creation

| Feature Code | I Want To | So That I Can | Priority | Notes |
|---------------------|---|--|----------|--|
| FT-MODEL-CREATE | Create new model numbers with all required specifications | Standardize product identification across the system | Must | Includes product type, manufacturer, weight, and approval workflow |
| FT-MODEL-APPROVE | Review and approve model numbers before operational use | Ensure catalog accuracy and completeness | Must | Model Management Team approval required before use |
| FT-MODEL-SUBSTITUTE | Replace rejected model numbers with approved substitutes | Automatically update all affected assets with correct models | Must | Auto-updates existing assets and notifies management team |

3.2 Model Management

| Feature Code | I Want To | So That I Can | Priority | Notes |
|-----------------|---|--|----------|--|
| FT-MODEL-SEARCH | Search model catalog by number, type, or manufacturer | Quickly find existing models during asset processing | Must | Fast search across all model attributes |
| FT-MODEL-IMAGE | Upload and manage images for model numbers | Provide visual reference for asset identification | Should | Image storage and display in model catalog |

4 Detailed Feature Requirements

4.1 Ft Model Create

4.1.1 Priority

Must Have

4.1.2 User Story

As a user, I want to create new model numbers so that I can standardize product identification across the system

4.1.3 Preconditions

User has model creation permissions, product types and manufacturers exist

4.1.4 Postconditions

Model created with approval status, available for use when approved

4.1.5 Acceptance Criteria

- Model Number (required, unique)
- Product Type selection from system list
- Manufacturer selection from system list
- Description (required for approval)
- Short Description (optional)
- Weight (optional, required for approval, numeric)
- Status: Active/Inactive
- Approval Status: Approved/Not Approved
- Sub Model Number (required when not approved)
- Image upload capability
- Operations Users can create but not approve models
- Model Management Team can approve and edit all fields
- Rejected model error with substitute suggestion

5 Data Model

5.1 Entities

5.1.1 Model

5.1.1.1 Description

Product model catalog

5.1.1.2 Key Fields

- model_id (Primary Key)
- model_number (Required, Unique)
- product_type_id (Foreign Key)
- manufacturer_id (Foreign Key)
- description (Required for approval)
- short_description
- weight (Required for approval)
- status (Active/Inactive)
- approval_status (Approved/Not Approved)
- sub_model_number
- image_url
- tech_line_classification
- created_date
- created_by
- approved_date
- approved_by

5.1.2 Modelsubstitution

5.1.2.1 Description

Rejected model substitutes

5.1.2.2 Key Fields

- substitution_id (Primary Key)
- rejected_model_id (Foreign Key)
- substitute_model_id (Foreign Key)
- substitution_date
- substituted_by
- affected_assets_count



6 Business Rules

- Model numbers must be unique across the system
- Description and weight required for model approval
- Operations Users can create but not approve models
- Model Management Team required for approval
- Rejected models must have substitute assigned
- Auto-update all assets when model substituted
- Approved models cannot be deleted, only inactivated



7 Sign Off

7.1 Approval

| Role | Name | Signature | Date |
|------|------|-----------|------|
| | | | |

7.2 Document History

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

