

Gemini said

This is the complete, consolidated **Product Requirements Document (PRD)** for your **Software License Management System (SLMS)**. You can copy this directly into your project management tool (like Azure DevOps, Jira, or a shared document) to kick off the development process.

Product Requirements Document: Software License Management System (SLMS)

1. Executive Summary

The SLMS is a centralized internal web application designed to manage the lifecycle, financial tracking, and compliance of corporate software assets. Its primary goal is to eliminate "shelfware," prevent service interruptions due to expired support, and provide a clear audit trail of software spend via Purchase Order (PO) association.

2. Technical Architecture

Component	Specification
User Interface	Browser-based (Optimized for Microsoft Edge)
Client OS	Windows 11 (AD-Joined)
Authentication	Windows Integrated Authentication (SSO via Active Directory)
Web Server	Windows Server 2019 / IIS
Database	Microsoft SQL Server 2019
File Storage	Secure Network File Share (UNC Path defined in Admin Panel)

3. Functional Requirements & Business Logic

3.1 License & Support Management

- **Unified Title Tracking:** A central inventory of all software titles, categorized by Manufacturer and Reseller.
- **Incremental Purchases:** New seats or nodes are added as **unique records** linked to the parent Title to maintain distinct audit trails for each transaction.
- **Strict Linkage Rule: Perpetual** licenses must be linked to a **Support/Maintenance contract** record.
- **1:1 Contract Logic:** Each Support Contract record covers exactly one License record.
- **Decommissioning:** Obsolete titles remain in the system for historical reporting but are visually **greyed out** and excluded from active alerts.

3.2 Financials & Documentation

- **Mandatory PO Tracking:** Every new license, subscription, or support renewal **must** have a Purchase Order (PO) number attached.
- **Currency & Cost Center:** Records must include the transaction currency and be assigned to a specific internal **Cost Center**.
- **Asset Mapping:** Simple text-based entry to list hosting servers, workstations, or assigned users.
- **Multi-File Attachments:** Ability to upload and link multiple documents (PDFs, Invoices, Keys) to a record, stored on the designated network file share.

4. Database Schema (SQL Server 2019)

SQL

-- Core Schema Highlights (Abbreviated)

CREATE TABLE SoftwareTitles (

 TitleID INT PRIMARY KEY IDENTITY(1,1),

 TitleName NVARCHAR(255) NOT NULL,

 ManufacturerID INT,

 IsDecommissioned BIT DEFAULT 0

);

```
CREATE TABLE Licenses (
    LicenseID INT PRIMARY KEY IDENTITY(1,1),
    TitleID INT,
    PONumber NVARCHAR(100) NOT NULL,
    LicenseType NVARCHAR(50), -- Perpetual/Subscription
    Quantity INT,
    CurrencyCode CHAR(3),
    CostCenter NVARCHAR(100),
    LicenseKey NVARCHAR(MAX), -- Large text field
    ExpirationDate DATETIME
);
```

```
CREATE TABLE SupportContracts (
    SupportID INT PRIMARY KEY IDENTITY(1,1),
    LicenseID INT UNIQUE, -- Enforces 1:1 relationship
    PONumber NVARCHAR(100) NOT NULL,
    EndDate DATETIME NOT NULL
);
```

5. Notification & Reporting System

5.1 Automated SMTP Alerts

Alerts are sent to an **IT Distribution List (AD Group)** at the following intervals prior to expiration: **45, 28, 14, and 7 days.**

Sample Subject Line: ACTION REQUIRED: [Software Title] Renewal Due in [X] Days

5.2 Dashboard & Exports

- **Expiration Dashboard:** High-level view of all items expiring within 30 and 60 days.
 - **One-Click Export:** Ability to export any grid view (Title History, Expirations, Inventory) to **Excel/CSV**.
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6. Security & Roles

Role	Permissions
System Admin	Full access to data + App Settings (SMTP, UNC Paths, Currencies).
Software Admin	Full CRUD access to Software, Licenses, and Contracts. No settings access.
License Viewer	Read-only access to all dashboards, records, and history.

7. User Acceptance Testing (UAT) Checklist

- **SSO:** Does the app recognize the user without a login prompt?
- **Permissions:** Can a "Viewer" see data but not edit?
- **Validation:** Does the system block a save if the **PO Number** is missing?
- **Linkage:** Does it force a Support Contract when adding a Perpetual license?
- **Storage:** Do uploaded files appear in the network folder (not the DB)?
- **History:** Can you see a chronological list of all renewals for a single title?