

DMS – DB-0 + DB-1 – Core Database Schema (SQL Server)

Audience: AI Studio

Version: v1.0

Status: Authoritative – For Generation

Database: SQL Server (Same DB as Platform)

Scope: DMS Core Persistence Layer

DB-0: Context & Integration Assumptions

- 1 DMS tables live in the SAME database as the existing platform tables
- 2 Authentication, Authorization, RBAC, Users, Tenants are owned by the platform
- 3 DMS references UserId and TenantId only; it does NOT define identity tables
- 4 All DMS tables MUST include TenantId for isolation
- 5 NO foreign keys to User table unless explicitly allowed by platform policy

DB-1: Core Schema Objectives

Generate a clean, complete, and readable SQL Server schema for the DMS that represents the domain truth defined in Phases 0–2. This phase defines structure only; no enforcement tricks.

Core Tables to Generate

- 1 DMS_Document
- 2 DMS_DocumentVersion
- 3 DMS_DocumentType
- 4 DMS_AuditEvent

AI Studio Generation Prompt

You are an Enterprise SQL Server Database Architect.

Generate SQL Server DDL for a Document Management System (DMS) that lives in the SAME database as an existing SaaS platform.

NAMING CONVENTION:

- Prefix all tables with DMS_
- Do NOT create User or Tenant tables

TABLES:

1. DMS_Document
 - DocumentId (PK)
 - TenantId (NOT NULL)
 - DocumentTypeId (FK)
 - OwnerUserId
 - CurrentApprovedVersionId (NULLABLE)
 - IsDeleted (BIT, default 0)
 - CreatedAt, CreatedByUserId
2. DMS_DocumentVersion
 - DocumentVersionId (PK)
 - TenantId (NOT NULL)
 - DocumentId (FK)
 - VersionNumber (INT, NULL)
 - BaseVersionId (NULLABLE, self-FK)

- LifecycleStatus (DRAFT, IN_REVIEW, APPROVED, ARCHIVED)
 - ValidityStatus (PENDING, VALID, EXPIRED, SUPERSEDED)
 - MetadataJson (NVARCHAR(MAX))
 - BlobReference (NVARCHAR(512))
 - CreatedAt, CreatedByUserId
 - ApprovedAt, ApprovedByUserId
 - UpdatedAt
3. DMS_DocumentType
- DocumentTypeId (PK)
 - TenantId (NULL = system type)
 - Code (unique per TenantId)
 - Name
 - MetadataSchemaJson
 - RequiresApproval (BIT)
 - TracksValidity (BIT)
 - ReviewCycleDays (INT, NULL)
 - CreatedAt
4. DMS_AuditEvent
- AuditEventId (PK)
 - TenantId (NOT NULL)
 - EntityType (DOCUMENT, VERSION)
 - EntityId
 - Action
 - ActorUserId
 - DetailsJson
 - CreatedAt

RULES:

- NO cascade deletes
- Soft delete only via DMS_Document.IsDeleted
- Include basic indexes for FK lookups
- Include comments explaining each table
- Do NOT add triggers or CHECK constraints in this phase

OUTPUT:

- SQL Server compatible CREATE TABLE statements
- FK constraints (Tenant-safe)
- Indexes

Acceptance Criteria

Schema must be readable, minimal, and aligned with DMS architecture. No enforcement logic is allowed in DB-1. Enforcement will be added in DB-2.