Maturion AI Integration & Performance Guide

1. Purpose

This guide defines the operational principles, document standards, and AI governance logic that enable Maturion to perform consistently and intelligently within your integrated security and maturity system.
It also outlines forward-looking features such as self-learning and analytics scaling, intended for phased implementation.

2. Document Structure Standards

- All MPS documents must follow a dual-format structure:
    • Requirement: A clear statement of obligation.
    • Evidence: The type of proof expected to validate implementation.
- This format enables AI to generate unambiguous criteria and map audit trails properly.
- All future uploads must adhere to this structure to ensure consistency across AI-generated content.

3. Tagging & Visibility Logic

To ensure optimal AI function, the following tagging and visibility rules must be applied:
- Document Type: 'MPS Document', 'General Knowledge', 'Policy', 'Terminology', etc.
- Domain: One of the five core domains or 'Global Instruction' for cross-domain rules.
- Tags: Keywords such as 'ai-logic', 'criteria-extraction', 'context', 'iso-reference' etc.
- Visibility: 'Superusers only' for control documents; 'All users' for front-end support docs.

4. AI Processing Behavior

Maturion uses uploaded documents based on their type and tags:
- MPS Documents → Drive criteria generation and scoring structure.
- Policies, SOPs, Standards → Used for reasoning support and alignment guidance.
- Glossaries/Terms → Enhance language precision and reduce ambiguity.

- Interpretation Rules → Govern extraction and inference behavior.

5. Reset & Reprocessing Protocol

When structure, interpretation logic, or documents change significantly:
- Use the admin function `reset_my_mps_documents()`.
- This clears old criteria, resets processing status, and enforces a clean AI reprocessing.
- Ensures Maturion is always working from the correct versioned baseline.

6. Self-Learning & Analytics (Phased Implementation)

Maturion will evolve to incorporate:
- Pattern recognition in maturity scoring, evidence quality, and behavior anomalies.
- Self-improvement loops based on user corrections and feedback scoring.
- Anomaly detection to flag misaligned or conflicting criteria across organizations.
- Auto-suggestion enhancements for domain-specific benchmarks and risk forecasting.
These functions will be activated in a phased roadmap and will always reference trusted logic and controlled context.

7. Developer & Admin Reference

This document must be used by Lovable developers and platform administrators to:
- Validate changes to document processors or scoring engines.
- Align feature builds with intended Maturion behavior.
- Prevent drift from approved logic models and AI boundaries.