**Integration & API Endpoints Implementation**

**Objective:** Establish robust internal and external system communication via secure, versioned APIs.

**Key Features:**

* **RESTful API Design (OpenAPI 3.0 Spec):**
  + Modular endpoints: /cases, /inventory, /users, /reports
  + Versioning: /api/v1/
  + Standard responses with HTTP status codes and JSON formatting
* **Webhooks & External Integrations:**
  + Incoming Webhooks: third-party logistics systems (for delivery updates)
  + Outgoing Webhooks: alerting system, partner reporting tools (e.g., DHIS2, Power BI)
  + Security: HMAC signature verification and IP allowlist
* **API Authentication:**
  + OAuth2.0 bearer tokens with scopes
  + API gateway with rate limiting and throttling
* **Documentation:**
  + Swagger UI at /docs
  + Postman collection for partner developers
  + Sample cURL and Python/JavaScript code snippets for consumers