

# Machine Tracker API - One-Page Summary

## What it is

Backend API for tracking cash movement in gaming machines across multiple business locations. It records daily periods, machine opens, and payouts with strong auditability.

## Who it is for

Business owners, managers, and employees who operate gaming machines and need cash accountability.

## What it does

- Manage businesses (create, update, enable or disable).
- Manage users and roles with JWT login.
- Open and close daily business periods.
- Record machine entry events with cash in, cash out, drops, and payouts.
- Track winners and payout plans, and record payout transactions.
- Query periods, machine entries, winners, and payouts for reporting workflows.
- Health check endpoint for service status.

## How it works

- Client -> REST controllers -> services -> repositories -> MongoDB.
- Spring Security with JWT filter provides authenticated user context.
- DTOs and MapStruct mappers isolate API contracts from domain objects.
- MongoDB GridFS bucket configured for file storage tied to periods (images).

## How to run

1. Install Java 21 (project uses Spring Boot and Maven wrapper).
2. Configure MongoDB URI and JWT secret in src/main/resources/application.properties.
3. Run ./mvnw spring-boot:run (server.port defaults to 8080).
4. Local MongoDB provisioning steps: Not found in repo.