

# ML Filesystem v1.8+

## Complete Technical Documentation

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Component	Metric
Documentation	173,000+ words
Source Code	~20,000 lines
Python Modules	24 files
API Endpoints	50+
Database Tables	17
Features	8 enhancements

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# 1. Executive Summary

The ML Filesystem v1.8+ is an AI-native file management system integrating machine learning directly into file operations.

## Key Features:

- Training Blocks with toggle enable/disable
- Enhanced Agents with 6 profiles
- 8 Logical Enhancements
- 50+ REST API endpoints
- 17-table database schema

## Status:

- ✓ Backend: 100% complete
- ✓ Database: 100% complete
- API: 95% (3 fixes needed)
- UI: 30% (3/8 pages)

## 2. Quick Start (30 Minutes)

Prerequisites: Python 3.11+, pip, 4GB RAM, 5GB disk

### Steps:

1. Setup: `python3 -m venv venv && source venv/bin/activate`
2. Install: `pip install -r requirements.txt`
3. Fix imports in `core/database.py` and `api/internal_api.py`
4. Initialize: `python -c 'from core.database import db; db.init_db()'`
5. Start: `python app.py`

### 3. Architecture

Layered architecture: API → Features → ML → Filesystem → Core

## 7. Training Blocks (Core Feature)

Training Blocks are first-class data collections with instant enable/disable.

Features: Toggle on/off, multiple files per block, two types (rote/process), export/import

## Complete Documentation

This PDF provides an overview. For the complete 75,000-word technical audit, all source code, and detailed guides, refer to the full documentation package.