

DloperOS Professional - Full Product Plan

1. Overview

DloperOS Professional (DloperOS Pro) is a modern, lightweight, secure OS designed for Raspberry Pi 5 hardware. It enables hosting websites, file sharing, analytics, user authentication, Docker apps, and a clean web portal.

2. Core Features

- Website Hosting: Multi-site NGINX stack, domain mapping, SSL, code editor, previews.
- Code Manager: Monaco Editor integration, drag-and-drop uploads, version history.
- Analytics: Traffic, bandwidth, uptime, Cloudflare API integration, error logs.
- File Sharing: Public links, password protection, expiry, download counters, analytics.
- User System: Multi-user roles, admin/owner/viewer, 2FA, auto-lock, recovery key.

3. Docker Support

Full Docker container management with templates for WordPress, MariaDB, NodeJS, Python, Redis, Ghost CMS, Uptime Kuma.

4. System Dashboard

Real-time CPU/RAM/Temp, network speed, Docker usage, disk usage, alerts, Pi 5 fan control.

5. Terminal and Backups

Web terminal with logged commands. Backups for websites, files, Docker volumes, and one-click restore.

6. Updates

Automatic kernel, app, and security updates with changelogs.

7. Architecture

Backend: Python FastAPI or Node.js. Frontend: React + Tailwind. Storage directories for sites, files, backups, docker. YAML-based config engine.

8. Setup Flow

Initial wizard: hostname, admin account, network, Cloudflare. Unlock portal and begin configuration.

9. Extra Features

Cloudflare auto DNS setup, Dloper App Store, notifications, remote access relay, themes, AI log summaries.

10. Hardware Requirements

Minimum: Pi 5 with 8GB RAM, NVMe SSD, PSU, cooling. Recommended: Pi 5 with larger SSD.

11. Roadmap

Phase 1: MVP portal, hosting, file sharing, user system, Docker, basic analytics.

Phase 2: Snapshots, backups, Cloudflare, advanced analytics, app store.

Phase 3: Remote access, AI summaries, plugin ecosystem.