

PureTidings Desktop & Mobile User Guide

Welcome to **PureTidings**, your high-performance, privacy-first news, RSS, and newsletter workstation built with **Tauri v2** and **Rust**.

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1. Core Philosophy

PureTidings is designed to be **100% local-first, private, and subscription-free**.

- **Zero Server Middlemen:** All RSS feeds, full-text scraping, and IMAP connections run directly from your device using native Rust networking (`request` , `rustls`).
 - **No Tracking or Cloud Lock-In:** Your reading history, subscriptions, and credentials never touch third-party cloud servers.
 - **Unlimited Storage:** Powered by a high-capacity IndexedDB engine (`PureTidingsDB`) that eliminates browser storage quotas.
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2. Getting Started & Feed Management

- **Adding Feeds:** Click the "+" button in the sidebar or open **Settings** ⚙️ > **Feeds & Categories** to add RSS, Atom, or YouTube feeds.
 - **Sidebar Views:**
 - **All Posts:** Chronological feed of all articles and newsletters.
 - **Unread Posts:** Dynamic view showing only unread content (automatically collapses empty folders).
 - **Starred (Favorites):** Articles and newsletters you've marked with a star (★).
 - **AI Summaries:** Articles added to your temporary research cart.
 - **Keyword Matches:** Articles matching your custom Boolean keyword rules.
 - **OPML Import & Export:** Migrate from any other feed reader with one-click OPML 2.0 import/export in **Settings > Backup & OPML**.
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3. Universal IMAP Email & Newsletters

PureTidings connects directly to any standard IMAP mailbox, consolidating your email newsletters (Substack, Morning Brew, developer digests) alongside your RSS channels.

- **Connecting an Inbox:**
 1. Open **Settings** ⚙️ > **Email Inboxes (IMAP)**.
 2. Enter your IMAP host (e.g. `imap.gmail.com`), port (`993`), username, and App Password.

3. Click "**Save Account**". Inboxes automatically appear under the  **Email Inboxes** folder in the sidebar.

- **Bidirectional Read Synchronization:** Marking an email as read in PureTidings automatically syncs the `\Seen` flag back to your mail server in the background. Ingestion uses non-intrusive `BODY.PEEK[]` to prevent premature status changes in external mail apps.
 - **Sandboxed High-Fidelity Viewer:** Newsletters render inside an isolated `<iframe>` canvas that preserves complex multi-column tables, avatars, and badges. Anti-hotlink CDN protection (`<meta name="referrer" content="no-referrer">`) ensures images load reliably.
 - **Light/Dark Toggle:** Click [ Light /  Dark] in Reader Mode to switch between a pristine white canvas and inverted dark styling.
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4. Nextcloud & WebDAV Cross-Device Cloud Sync

Synchronize your feeds, read states, favorites, rules, and inboxes across Windows, macOS, Linux, and Android without third-party subscriptions.

- **Configuration Steps:**
 1. Open **Settings**  > **Backup & OPML**.
 2. Under **Nextcloud & WebDAV Cloud Sync**, enable "**Enable Nextcloud / WebDAV Cross-Device Sync**".
 3. Enter your connection details:
 - **WebDAV Server URL:** Your Nextcloud base address (e.g. `https://cloud.your-domain.com`).
 - **Username:** Your Nextcloud username (or email).
 - **App Password / Token:** A dedicated App Password generated in Nextcloud (*Settings > Security > Devices & sessions > Create new app password*).
 - **Remote File Path:** The cloud path (e.g. `/puretidings_sync.json` or `/NEXTCLOUD PureTidings_sync/puretidings_sync.json`).
 4. Click "**Test Connection**", then click "**Sync Now**" and "**Save Settings**".
- **What Gets Synchronized:**
 - Complete folder and feed tree (`feedTree`) with custom names and order.
 - Read article markers (`readLinks`), starred favorites (`favoritedLinks`), and AI summary cart (`summaryLinks`).
 - Keyword filter rules (`rules`), configured email accounts (`emailAccounts`), and UI language (`appLanguage`).
- **Mathematical LWW-Element-Set Reconciliation:**
 - Uses Last-Write-Wins (LWW) conflict-free state tracking with microsecond timestamps (`articleMetaTimestamps`).
 - Toggling a star () or marking an article unread on Android or Desktop carries an exact timestamp, ensuring that recent actions prevail deterministically over older states without reversion.
- **Responsive Debounced Sync & Lifecycle Flush:**
 - User interactions trigger a fast ~1.5–2.5 second debounced background upload to Nextcloud.
 - On mobile devices, app suspension (`visibilitychange` / `pagehide`) immediately flushes pending changes to guarantee synchronization before the app is paused.
- **Automatic Failsafes:**
 - **Brute-Force Resilient:** In-memory endpoint caching (`ENDPOINT_CACHE`) prevents repeated candidate probing that could trigger Nextcloud's Brute Force Protection (`TooManyRequests` /

HTTP 429).

- **Automatic Folder Creation (MKCOL):** If the target folder does not exist on your server, PureTidings creates it automatically.

5. AI Features (Bring Your Own Key)

PureTidings integrates with **Google Gemini** for fast, high-quality article and video analysis without monthly subscription costs.

- **Setup:** Obtain a free API key from [Google AI Studio](#) and enter it in **Settings** ⚙️ > **AI Features**.
- **Article Summaries:** Click the "🔮 **AI Summary**" button in Reader Mode to generate structured key takeaways.
- **YouTube Video Summaries (TL;DW):** For YouTube feeds, PureTidings extracts timed transcripts via InnerTube and produces comprehensive video summaries.
- **Custom Prompting:** Tailor AI behavior in Settings (e.g. translation to German/French/Spanish, Markdown tables, or financial metrics extraction).
- **Direct Local Storage Saving:** Save summaries directly to your device's filesystem (/storage/emulated/0/Download/ on Android, Downloads folder on Desktop) via native Rust IPC (`save_download_file`), with Share sheet fallback.

6. Organization & Touch-Friendly Hierarchy

- **Infinite Nested Folders:** Organize feeds into categories (Tech, Newsletters, Markets, Media).
- **Parent Folder Selector:** Easily nest folders or move them back to root with automatic cycle detection.
- **Touch-Friendly Reordering (▲ / ▼):** Reorder feeds and folders on touchscreens, tablets, and phones with dedicated 1-tap Up and Down buttons.
- **Boolean Search:** Filter headlines instantly using operators: `+` (AND), `,` (OR), and `-` (NOT).
- **Keyword Rules:** Set up rules in Settings to highlight important topics or trigger system notifications.

7. Distraction-Free Reader Mode & Media

- **Mozilla Readability Engine:** Strips advertisements, cookie consent banners, and tracking clutter.
- **Floating, Resizable & Draggable:** Freely resize the reader window in width and height using the corner grip (▲), or drag it across your desktop. On mobile, 1-tap Fit/Maximize (☐) and landscape auto-clamping keep controls fully accessible.
- **Embedded YouTube Player:** Responsive 16:9 player embedded directly inside Reader Mode.
- **Clean Export:** Copy or download articles and summaries in Markdown (`.md`), HTML (`.html`), or Plain Text (`.txt`).

8. Multi-Language (i18n) & System Integration

- **Four Integrated Languages:** Switch seamlessly between **English** (`en`), **German** (`de`), **Spanish** (`es`), and **French** (`fr`) in Settings.
- **Native System Notifications:** Receive alerts for keyword matches and new articles via Windows Toast, macOS Notification Center, Linux banners, and Android status bar.
- **System Autostart (Desktop):** Option to launch quietly in the background on system boot.
- **Screen Wake Lock:** Keep your mobile display awake while reading long articles.
- **External Browser Opening:** Links open directly in your system default browser (`tauri-plugin-opener`).

9. Backups & Data Sovereignty

- **Scheduled Daily Backups:** Configure a dedicated folder on your hard drive for automated daily backups of OPML feeds and complete JSON state.
- **Full Application Backup (JSON):** Export all feeds, folders, reading history, email accounts, rules, and AI configurations into a single file.
- **Mobile Clipboard Restoration:** Overcome mobile file dialog limitations with dedicated "📄 Paste OPML" and "📄 Paste Backup" buttons.

10. Desktop Browser Satellite Extension (Companion)

PureTidings includes a lightweight, companion Chrome extension located in `puretidings-extension/` designed to integrate your daily desktop browser workflow with the PureTidings Desktop application.

- **Local High-Speed Bridge (127.0.0.1:41789):** When the desktop application runs, it opens a lightweight, local-only HTTP server. The Satellite extension connects directly to this port, completely bypassing external cloud services.
- **Instant Toolbar Access & Unread Counter:** Displays an active badge with total unread posts and provides a rapid pop-up feed reader without leaving your current browser tab.
- **1-Click Quick Subscribe:** Detects RSS, Atom, and YouTube channels on web pages you browse and lets you add them directly to your desktop feed tree with a single click.
- **Bidirectional Live Status Sync:** Marking an article read, starring a favorite (★), or queuing an item into the AI Summary Cart from the browser extension updates the desktop app immediately, and vice versa.
- **Desktop-Only by Design (Android Distinction):**
 - The Satellite extension is built strictly for desktop Chromium browsers (Google Chrome, Brave, Microsoft Edge).
 - Mobile Google Chrome on Android does not support browser extensions, and the local HTTP bridge is deliberately compiled out on Android (`#[cfg(not(target_os = "android"))]`) to prevent battery drain and respect OS sleep states.
 - On Android, PureTidings runs as a **complete, standalone native application** (`PureTidings_aarch64.apk`). All cross-device continuity between your Android device and your desktop is handled automatically by the **Nextcloud & WebDAV Cloud Sync** engine.