

The State of PC Game Launchers:

Architecture, Ecosystem & Verification Study

A technical case study and primary-source verification report comparing Ascendara against Hydra Launcher, Playnite, Project GLD, Heroic Games Launcher, Lutris, and GOG Galaxy 2.0 across 24 architectural criteria.

AUTHOR & MAINTAINER	SUBJECT VERSION	LAUNCHERS AUDITED	PUBLIC REPOSITORY
Santiago Billeci (tago)	Ascendara v11.5.0 (3 OS)	7 Launchers · 24 Vectors	github.com/Ascendara/ascendara

01 // EXECUTIVE SUMMARY & ARCHITECTURAL THESIS

Why the Modern PC Gaming Ecosystem Fragmented—and How Ascendara Unifies It

Over the past decade, desktop game launchers have split into two disconnected camps. On one side sit **library aggregators and storefront clients**—such as **Playnite**, **Heroic Games Launcher**, **Lutris**, and **GOG Galaxy 2.0**. These tools excel at organizing shortcuts or authenticating with commercial DRM storefronts, but they contain no built-in standalone game catalog, cannot resolve or extract multi-part direct download archives, and frequently depend on fragile third-party plugins for essentials like save-game backups or achievement tracking.

On the other side sit **script- or source-driven downloaders**—such as **Hydra Launcher** and **Project GLD**. While these tools integrate downloaders and torrent clients, they ship as empty shells: a newly installed user sees zero downloadable games until they manually hunt down external JSON source URLs on third-party wikis (e.g., *library.hydra.wiki*) or install community Lua scraper scripts into local folders. Furthermore, critical features such as save backups are either locked behind recurring paywalls (Hydra Cloud) or require manual CLI configuration, and neither platform can connect to your commercial Steam, Epic Games, or GOG store accounts to unify the games you already own.

Ascendara bridges both worlds inside a single open-source architecture across **Windows, Linux, and macOS**. It combines a ready-to-browse **4,000+ game local offline index** (plus **900,000+ external source entries**), **2-click seamless GoFile/PixelDrain downloads** with automatic extraction and file verification, **OS-keyring encrypted Store Accounts** (Steam, Epic Games, GOG) alongside a 5-launcher local installation scanner, **100% free local Ludusavi save backups**, a **25-console Retro emulation library** with PS1/PS2 memory card tools, a controller-first **Big Picture Mode**, and an end-to-end encrypted **Mobile Companion Web App**.

4,000+ / 900K+ Official Local Index + External Sources	24 / 24 Native Built-In Capabilities (Zero 3rd-Party Plugins)	45+ Docs Pages Features, Binaries, IPC Logic & REST API	3 OS · 25 Consoles Win / Linux / macOS + Ascendara Retro
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02 // AUDIT METHODOLOGY & PRIMARY SOURCE CITATIONS

How Every Claim on ascendara.app/compare Was Verified

Every data point presented on the Ascendara comparison page and in this report was audited directly against each project's public source tree, build manifest, legal terms, and official documentation as of October 2026:

- **1. Ascendara (v11.5.0)** — Audited via github.com/Ascendara/ascendara (`package.json`, `electron/modules/store-accounts/*`, `electron/modules/launcher-discovery.js`, `electron/modules/proton.js`, `binaries/*`) and github.com/Ascendara/docs (45+ documentation guides covering user features, binary internals, IPC channels, system design, and REST API endpoints).
- **2. Hydra Launcher (v4.2.0)** — Audited via github.com/hydralauncher/hydra (`README.md`, `hydra-native libtorrent bridge`), library.hydra.wiki (community sources), hydrathemes.shop, and github.com/hydralauncher/hydra-legal/blob/main/subscription-terms.md (Hydra Cloud pricing & 2-backup / 500MB cap).
- **3. Playnite** — Audited via playnite.link, api.playnite.link/docs, playnite.link/addons.html, github.com/JosefNemec/Playnite (C# / WPF Windows dependency), and github.com/darklinkpower/PlayniteExtensionsCollection.
- **4. Project GLD** — Audited via y0urd34th.github.io/Project-GLD and github.com/Y0URD34TH/Project-GLD (`README.md`, `LuaParams.md`, `DirectX/Win32 ImGui build`, `Scripts/*.lua`, `aria2 + libtorrent + Rclone/Ludusavi`).
- **5. Heroic Games Launcher (v2.22.4)** — Audited via heroicgameslauncher.com and github.com/Heroic-Games-Launcher/HeroicGamesLauncher (Legendary for Epic, gogdl for GOG, Nile for Amazon Prime Gaming, Wine/Proton manager).
- **6. Lutris** — Audited via lutris.net/about and github.com/lutris/lutris (`README.rst`, `Python/GTK Linux-only architecture`, `YAML/JSON installer scripts`, `local pga.db SQLite storage`).
- **7. GOG Galaxy 2.0** — Audited via gog.com/galaxy (proprietary CD PROJEKT client for Windows/macOS, mandatory GOG account login, deprecated third-party Python community integrations).

03 // ASCENDARA ARCHITECTURE & SOURCE-CODE EVIDENCE

Inside Ascendara's Multi-Binary Desktop & Cloud Stack

Unlike single-process Electron wrappers that freeze the UI thread during heavy archive extraction or directory scanning, Ascendara separates its React 19 + Vite 7 + Electron 40 frontend from specialized native Python and Rust sidecar binaries and hardened Electron main-process modules.

A. Offline-First Local Game Index & 600× Smaller Delta Sync

Ascendara downloads a curated catalog of 4,000+ games directly to disk (stored in %APPDATA%\ascendara\localindex\ascendara_games.json on Windows, ~/.config/ascendara/localindex on Linux, and ~/Library/Application Support/ascendara/localindex on macOS). Using ETag version tracking in sync.json, the client only pulls delta updates when the index changes, and caches cover images progressively in imgs/. Users can search, filter by genre/DLC/Online-Fix/size, and browse with zero internet connection. Switching to External Sources Mode unlocks 900,000+ entries from community buckets or custom JSON files (supporting both Ascendara's Games Array and Hydra's Downloads Array schema).

Source Evidence: [electron/modules/local-refresh.js](#) · [electron/modules/community-index.js](#) · [docs/features/refreshing-index.md](#) · [docs/features/external-sources.md](#)

B. Connected Store Accounts Vault + Credential-Free Local Launcher Scanner

Ascendara provides two complementary ways to unify your existing games: (1) Connected Store Accounts lets you sign into Steam, Epic Games, and GOG inside isolated, sandboxed BrowserWindow partitions with navigation guards and zero third-party script access. Credentials and session tokens are encrypted on disk via the operating system's native keyring (electron.safeStorage in store-accounts/vault.js). Owned games—including uninstalled titles—appear directly in your Library with Steam/SteamGridDB artwork, installation detection, and 1-click Play or Store Install. (2) For users who prefer zero account sign-in, launcher-discovery.js and launcher-import.js scan local drives and Windows registry keys for installed Steam, Epic Games, GOG Galaxy, Ubisoft Connect, and Battle.net games, with an optional 'Switch & Download' flow to convert matched titles into Ascendara-managed installations.

Source Evidence: [electron/modules/store-accounts/{index,providers,games,vault}.js](#) · [electron/modules/launcher-discovery.js](#) · [electron/modules/launcher-import.js](#) · [src/components/StoreAccountsDialog.jsx](#)

C. Multi-Threaded Download Pipeline, Auto-Extraction, Verification & Defender Guard

AscendaraDownloader (Python sidecar binary bundled with UnRAR/archive handlers) resolves GoFile and PixelDrain links for 2-click seamless downloads with no browser or CAPTCHA. Downloads run through three explicit stages: Downloading (up to 16 threads with smart resume and speed graph) -> Extracting -> Verifying (checking every extracted file against expected sizes). For external web links, the official Ascendara Download Handler extension (published on Chrome Web Store & Firefox Add-ons) captures browser downloads and pipes them into the app. On Windows, Ascendara can automatically register download directories with Windows Defender via Add-MpPreference -ExclusionPath so online-fix and steam_api DLLs are never quarantined.

Source Evidence: [binaries/AscendaraDownloader/src/{AscendaraDownloader,AscendaraGofile,AscendaraExtraction,AscendaraTransfer}.py](#) · [docs/features/downloading.md](#)

D. Official TorBox Debrid Partnership & Opt-In Torrent Handler

As an official partner of TorBox (torbox.app), Ascendara integrates TorBox directly into the Download Manager and sidebar navigation. With a TorBox API key, hoster links from 1Fichier and MegaDB are unrestricted into high-speed direct links, and magnet torrents are offloaded to TorBox cloud seedboxes so your local IP is never exposed to P2P swarms. Users who prefer local torrenting can enable AscendaraTorrentHandler with qBittorrent WebUI.

Source Evidence: [src/pages/TorboxDownloads.jsx](#) · [binaries/AscendaraTorrentHandler/src/AscendaraTorrentHandler.py](#) · [docs/features/torbox-integration.md](#)

E. Free Native Ludusavi Save Backups & Ascendara Retro (Up to 25 Consoles)

Ascendara integrates Ludusavi (Rust save backup tool) natively in electron/modules/ludusavi.js. Every user—without paying a cent or creating an account—can back up and restore saves per game, trigger automatic backups on game exit via AscendaraGameHandler, choose ZIP/Deflate/BZip2/Zstd compression, and set backup retention counts. In Ascendara Retro (electron/modules/retro/*), classic console ROMs get their own library with LaunchBox metadata matching, multi-disc selectors, PS1/PS2 memory card management, 12 free console presets (PS1, PS2, PS3, PSP, GameCube, Wii, NES, SNES, N64, GB, GBC, GBA), and 13 additional Ascend presets (Switch, Wii U, 3DS, DS, Xbox, Xbox 360, Dreamcast, Saturn, Genesis, Sega CD, 32X, Naomi, TurboGrafx-16).

Source Evidence: [electron/modules/ludusavi.js](#) · [electron/modules/retro/{index,platforms,saves,scanner}.js](#) · [docs/features/game-backups.md](#) · [docs/features/retro.md](#)

F. Linux Proton/UMU Runner Manager, Workshop Downloader, Companion & System Center

On Linux, electron/modules/proton.js and umu-database.js provide 1-click installation for UMU-Launcher, Proton CachoOS, and Proton-GE, automatic UMU ID Protonfixes lookup, and per-game prefix resets. Across desktop platforms, Ascendara also ships a SteamCMD-powered Steam Workshop Downloader, Ascendara Timemachine (archived game version rollback), a KHInsider soundtrack player, AscendaraAchievementWatcher, System Center (health checks, settings recovery snapshots, version rollback, and Rust AscendaraCrashReporter), and the end-to-end encrypted Ascendara Companion mobile web app (webview.ascendara.app).

Source Evidence: [electron/modules/{proton,umu-database,steamcmd,recovery}.js](#) · [binaries/AscendaraCrashReporter/src/main.rs](#) · [binaries/AscendaraAchievementWatcher/src/watchdog.js](#)

G. In-Depth Feature, Helper Binary, IPC & API Documentation (45+ Pages)

Ascendara treats documentation as a first-class engineering deliverable (hosted at ascendara.app/docs and open-sourced at github.com/Ascendara/docs). Beyond end-user guides for every feature, the documentation includes dedicated developer and architecture manuals detailing the internal logic of each compiled binary tool (Download Manager, Torrent Handler, Game Handler, Achievement Watcher, Local Refresh, Language Translator, Notification Helper, Crash Reporter), Electron main-to-renderer IPC channel contracts, Companion webview encryption, system design diagrams, and REST API endpoint specifications.

Source Evidence: [github.com/Ascendara/docs](#) · [docs/developer/{system-design,ipc-reference,creating-the-tools,tech-stack}.md](#) · [docs/binary-tool/*.md](#) · [docs/api-reference/*.md](#)

04 // COMPLETE 24-FEATURE CROSS-LAUNCHER MATRIX

Side-by-Side Technical Capability Audit Across All 7 Launchers

The matrix below records the verified implementation state of all 24 features displayed on ascendara.app/compare.
 Legend: **YES** = Built-in natively; **PLUGIN / MANUAL** = Requires third-party extension, manual Lua/YAML script, or external JSON URL; **PARTIAL** = Limited scope or locked behind a paid cloud tier; **NO** = Unsupported.

Feature / Capability	Ascendara	Hydra	Playnite	Project GLD	Heroic	Lutris	GOG Galaxy
1. Open Source Codebase	YES Public GitHub	YES MIT	YES MIT	YES Apache-2.0	YES GPLv3	YES GPLv3	NO Proprietary
2. Cross-Platform OS Builds	YES Win/Linux/Mac	PARTIAL Win & Linux	NO Windows only	NO Windows only	YES Win/Linux/Mac	NO Linux only	PARTIAL Win & Mac
3. No Mandatory Account	YES Zero sign-in	YES Optional	YES Local only	YES Optional	PARTIAL Store login	YES Optional	NO GOG required
4. Built-in Proton/UMU Manager	YES UMU+Proton	PARTIAL Wine path	NO Win only	NO Win only	YES Wine/Proton	YES Runners/UMU	NO No Linux
5. 105+ Languages & Translator	YES 105 langs	YES 35+ langs	YES 40+ Crowdin	PARTIAL 10+ langs	YES 40+ Weblate	PARTIAL 20+ langs	PARTIAL 7 langs
6. Theme Editor & Ctrl+K Palette	YES Editor+Ctrl+K	YES CSS Shop	PLUGIN Add-on themes	YES ImGui editor	PARTIAL CSS themes	NO GTK theme	NO Dark/Light
7. Out-of-Box Game Index	YES 4,000+ ready	PLUGIN Manual JSON	NO None	PLUGIN Lua scripts	PARTIAL Owned only	PARTIAL Scripts only	PARTIAL GOG Store
8. Offline Local Index Cache	YES ETag cache	PARTIAL Source lists	YES Local DB	NO Live scraper	PARTIAL Owned cache	YES SQLite DB	PARTIAL Online sync
9. External & Custom JSON Lists	YES 900K+ & JSON	YES JSON URLs	PLUGIN C# plugins	YES Lua scripts	NO Fixed stores	YES YAML scripts	NO Broken plugins
10. Zero-Key Metadata & PC Check	YES Steam+HLTB+PC	PARTIAL Steam+HLTB	PLUGIN IGDB/Addons	PARTIAL IGDB+Reqs	PARTIAL Store+HLTB	NO Basic banner	PARTIAL Store info
11. 2-Click Seamless Downloads	YES GoFile/Pixel	PARTIAL Source URI	NO No downloader	YES aria2 scripts	YES Owned stores	PARTIAL Script URLs	YES Owned GOG
12. Auto-Extract & File Verify	YES Extract+Verify	PARTIAL Extract only	NO None	PARTIAL Extract only	YES Store repair	PARTIAL Script extract	YES GOG repair
13. Browser Download Extension	YES Chrome/Firefox	NO None	NO None	PARTIAL CEF browser	NO Store webview	PARTIAL lutris: URI	NO None
14. Official TorBox Debrid	YES Partner + Tab	YES TorBox/RD	NO None	YES TorBox/RD	NO None	NO None	NO None
15. Windows Defender Exclusion	YES 1-Click Toggle	NO Manual OS	NO Manual OS	NO Manual OS	NO Manual OS	NO Linux only	NO None
16. Torrent & Cloud Seedbox	YES TorBox+qBit	YES libtorrent	NO None	YES libtorrent	NO None	NO None	NO None
17. Connected Store Accounts	YES Steam/Epic/GOG	NO None	YES Store plugins	NO None	YES Epic/GOG/Amz	YES Steam/GOG/Epic	PLUGIN GOG + broken
18. Local Multi-Launcher Scan	YES 5 launchers	PARTIAL Manual add	YES 20+ plugins	PARTIAL Manual add	PARTIAL Manual import	YES Local scan	PLUGIN Broken plugins
19. Smart Collections & History	YES Smart+History	PARTIAL Basic list	YES Filter presets	PARTIAL Genre filters	PARTIAL Categories	PARTIAL Categories	YES Tags/Filters

Feature / Capability	Ascendara	Hydra	Playnite	Project GLD	Heroic	Lutris	GOG Galaxy
20. Dedicated Retro & MemCards	YES 25 consoles	YES 12 Classics	YES Emu profiles	NO None	NO None	YES 20+ runners	NO None
21. Big Picture Controller UI	YES 2 TV layouts	YES Big Picture	YES Fullscreen	PARTIAL Hotkeys only	YES Console mode	NO Desktop only	NO Desktop only
22. Free Ludusavi Save Backups	YES Free + Cloud	PARTIAL Paid Cloud	PLUGIN Ludusavi addon	YES Ludusavi+Rclone	PARTIAL Store cloud	NO Manual	PARTIAL GOG cloud
23. Workshop, Timemachine, OST, Mobile Companion & System Center	YES All built-in	NO Not supported	PLUGIN Music addon only	NO Not supported	NO Not supported	NO Not supported	PARTIAL GOG rollback
24. Feature, Binary, IPC & API Docs	YES 45+ Doc Pages	PARTIAL Basic setup	YES Manual + SDK	PARTIAL README + Lua	PARTIAL GitHub Wiki	PARTIAL Installer rst	NO Support FAQ

05 // COMPETITOR-BY-COMPETITOR SOURCING & EVIDENCE

Detailed Findings & Verifiable Citations for Each Launcher

Below is the granular analysis of all six alternative launchers compared on ascendara.app/compare, acknowledging each project's genuine engineering strengths while documenting the exact architectural gaps that Ascendara solves.

01 // HYDRA LAUNCHER (hydralauncher.gg)

Architecture: Electron, React, TypeScript & Rust native addon (libtorrent bridge) · OS: Windows & Linux (No macOS)

- **Empty Catalog Out of the Box:** Hydra ships with zero built-in game sources. Users must visit external community directories such as library.hydra.wiki to locate and import JSON source URLs before any game can be downloaded. Ascendara ships with a 4,000+ curated local game index out of the box AND supports Hydra's exact downloads JSON schema in External Sources Mode (900K+ entries).
- **Save Backups Locked Behind Paid Hydra Cloud:** Per Section 2 of Hydra's official Subscription Terms (github.com/hydralauncher/hydra-legal/blob/main/subscription-terms.md), game save backups require a paid Hydra Cloud subscription (R\$ 9.99/mo, or ~\$1.99 USD/mo) and are capped at 2 backups per game and 500 MB per backup. In Ascendara, local Ludusavi save backups (manual and auto-on-close, up to 10+ retained backups with ZIP/Zstd compression) are 100% free for every user.
- **No Connected Store Accounts:** Hydra cannot authenticate with Steam, Epic Games, or GOG to display or launch your owned commercial library. Ascendara includes both OS-keyring encrypted Store Accounts (Steam, Epic, GOG) and a 5-launcher local installation scanner.
- **Missing Ecosystem Tools:** Hydra has no Chrome/Firefox browser download capture extension, no Steam Workshop downloader, no version rollback archive (Ascendara Timemachine), no KHIInsider soundtrack player, no real-time friend chat, and no encrypted mobile web companion.

Verified Sources: hydralauncher.gg · github.com/hydralauncher/hydra · library.hydra.wiki · hydrathemes.shop · legal.hydralauncher.gg/subscription-terms

02 // PLAYNITE (playnite.link)

Architecture: C# / .NET / Windows Presentation Foundation (WPF) · OS: Windows Only

- **No Standalone Game Discovery or Downloader:** Playnite's official manual (api.playnite.link/docs) defines it strictly as a video game library manager. It cannot discover, download, extract, or verify standalone game archives, nor does it support TorBox debrid or torrents.
- **Heavy Reliance on Third-Party Add-ons:** Capabilities that Ascendara includes natively—such as Ludusavi save backups, achievement watching (*SuccessStory*), HowLongToBeat times, Steam trailers/reviews, and custom themes—require installing, authenticating, and maintaining separate third-party extensions from playnite.link/addons.html or github.com/darklinkpower/PlayniteExtensionsCollection. Playnite's own add-ons page warns: *'Installing 3rd party add-ons may result in performance and usability issues.'*
- **Strictly Windows-Only:** Because Playnite's UI is built on Microsoft's WPF framework, it cannot run natively on Linux or macOS. Ascendara ships native builds for Windows, Linux (with built-in UMU/Proton management), and macOS.
- **Parity on Owned Store Libraries:** With Ascendara's new Store Accounts vault, Ascendara now matches Playnite's ability to connect Steam, Epic Games, and GOG accounts to browse all owned games (including uninstalled ones) and install or launch them.

Verified Sources: playnite.link · api.playnite.link/docs · playnite.link/addons.html · github.com/JosefNemec/Playnite · github.com/darklinkpower/PlayniteExtensionsCollection

03 // PROJECT GLD (y0urd34th.github.io/Project-GLD)

Architecture: C++ / Dear ImGui / DirectX / Embedded CEF / Lua API · OS: Windows Only

- **Manual Lua Script Setup:** Per Project GLD's README.md, searching and downloading games requires installing Lua scripts into Documents/Project-GLD/Scripts and manually selecting a script per search result. Ascendara requires zero script installation and searches 4,000+ local index titles instantaneously offline.
- **Utilitarian ImGui Interface & No Fullscreen TV Mode:** Project GLD renders its interface with Dear ImGui and maps joystick hotkeys to desktop popup dialogs rather than offering a dedicated 10-foot television interface like Ascendara's Big Picture Mode.
- **Windows-Only & No Retro Library:** Project GLD requires DirectX and Visual C++ Redistributables on Windows (no Linux or macOS support), cannot connect to Steam/Epic/GOG store accounts to view owned games, and has no dedicated Retro console library or memory card manager.

Verified Sources: y0urd34th.github.io/Project-GLD · github.com/Y0URD34TH/Project-GLD/blob/main/README.md · [LuaParams.md](#)

04 // HEROIC GAMES LAUNCHER (heroicgameslauncher.com)

Architecture: Electron, TypeScript, React, Legendary (Epic), gogdl (GOG), Nile (Amazon) · OS: Win, Linux, macOS

- **Bound to Commercial Store Ownership:** Heroic is an open-source client specifically for games you own on Epic Games Store, GOG, and Amazon Prime Gaming. It has no standalone game discovery catalog, no multi-hoster DDL/archive extractor, no TorBox debrid integration, and does not sync owned Steam store accounts.
- **No Universal Local Save Backup or Retro Frontend:** Heroic only syncs store-native cloud saves for supported Epic/GOG titles and lacks a built-in universal Ludusavi save backup system or a dedicated Retro ROM/emulator catalog.
- **Linux Runner Parity + More:** While Heroic is praised for its Wine/Proton manager on Linux, Ascendara matches this capability by integrating UMU-Launcher, Proton CachyOS, Proton-GE, and automatic UMU ID Protonfixes—while adding Steam/Epic/GOG Store Accounts, a 4,000+ standalone index, 25-console Retro support, and mobile Companion control.

Verified Sources: heroicgameslauncher.com · github.com/Heroic-Games-Launcher/HeroicGamesLauncher/blob/main/README.md

05 // LUTRIS (lutris.net)

Architecture: Python 3 & GTK Desktop Client · OS: Linux Only

- **Linux-Only Desktop Utility:** Lutris runs exclusively on Linux and has no Windows or macOS builds. Its GTK desktop window lacks a controller-driven Big Picture mode for couch or living-room play.
- **Script-Dependent Installations & Minimal Metadata:** Lutris automates Wine and emulator runners via YAML/JSON scripts on *lutris.net*, but provides no standalone pre-indexed game download catalog, no post-extraction file integrity verifier, no built-in Ludusavi save backup manager, no achievement watcher, and no mobile remote companion.

Verified Sources: lutris.net/about · github.com/lutris/lutris/blob/master/README.rst

06 // GOG GALAXY 2.0 (gog.com/galaxy)

Architecture: Proprietary Commercial Client (CD PROJEKT) · OS: Windows & macOS (No Linux)

- **Closed-Source & Mandatory Account Lock-In:** GOG Galaxy is proprietary software that requires a GOG.com account login before you can even access the interface, and has never shipped a Linux version.
- **Broken Third-Party Store Integrations:** GOG Galaxy's headline 'unify all stores' feature relied on community Python plugins that frequently disconnect or fail OAuth flows. Ascendara's first-party Store Accounts module (`electron/modules/store-accounts`) and local launcher scanner (`electron/modules/launcher-discovery.js`) integrate Steam, Epic Games, GOG, Ubisoft Connect, and Battle.net reliably without fragile community plugins.

Verified Sources: gog.com/galaxy · [electron/modules/store-accounts/providers.js](#) · [electron/modules/launcher-discovery.js](#)

INDEPENDENT VERIFICATION & OPEN-SOURCE TRANSPARENCY

Ascendara is recognized as #1 GOAT on the Megathread and is one of the starred game launchers on FMHY. Every module referenced in this study can be inspected directly at <https://github.com/Ascendara/ascendara> and <https://ascendara.app/docs>. Interactive comparison matrix available at <https://ascendara.app/compare>.