LetsBe Biz — Tool Catalog

28 Current Tools and 27 Expansion Candidates

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1. LetsBe Biz — Tool Catalog

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1.1 1. Purpose

This document catalogs every tool that LetsBe Biz deploys (or plans to deploy) on customer VPS instances. It serves three audiences: engineering (for Docker stack specs and resource planning), product (for onboarding and recommendations), and sales (for the "25+ tools" pitch).

Selection criteria — every tool must: 1. Be **fully open source** with a license compatible with managed service deployment (MIT, Apache 2.0, AGPL, GPL, BSD, etc. — **not** BSL, Sustainable Use, or similar source-available licenses that restrict commercial hosting) 2. Have a **comprehensive, free API** (REST or GraphQL — needed for AI agent integration) 3. Be **completely free** to use with no paid-only features blocking core functionality 4. Run in **Docker** (official or well-maintained community image) 5. Be **actively maintained** (commits within last 6 months, responsive issue tracker) 6. Be **in addition** to the current tool set (no replacements in this version)

Catalog philosophy — curated defaults, not a free-for-all:

We offer **one recommended default per niche**, with an alternative only when there's a genuine functional difference. We are *not* trying to stock two of everything. Overlap is only justified when two tools serve meaningfully different workflows within the same domain. Examples:

- **Justified overlap:** Chatwoot (real-time omnichannel chat) + Zammad (structured ticket/SLA helpdesk) — different support models, often used together.
- **Justified overlap:** BookStack (structured wiki — books/chapters/pages) + Wiki.js (Git-backed developer wiki) — different knowledge management paradigms for different team types.
- **Not justified:** NocoDB + Baserow — both are no-code spreadsheet-over-database tools with near-identical feature sets. We pick one (NocoDB).

When in doubt: fewer, better-integrated tools > more options. Each additional tool increases maintenance burden, Ansible complexity, and the surface area our AI agents need to cover.

1.2 2. Current Tool Inventory (28 Tools — Deployed)

These tools are currently configured in `/letsbe-ansible-runner/stacks/` and listed in the Hub's `ToolsEditor.tsx`, or are confirmed integrations in progress. They are proven, tested (or being integrated), and ready (or nearly ready) for customer provisioning.

1.2.1 Core Infrastructure (3) — Always deployed, not customer-selectable

Tool	Stack Key	Description	License	Docker Image
Orchestrator	orchestrator	LetsBe control plane API — manages VPS lifecycle, tool deployment, agent coordination	Proprietary	Custom
SysAdmin Agent	sysadmin	Remote automation worker — executes provisioning and maintenance tasks	Proprietary	Custom
Portainer	portainer	Container management UI — visual Docker management for advanced users	Zlib	portainer/portainer-ce

1.2.2 Communication (3)

Tool	Stack Key	Description	License	Docker Image
Chatwoot	chatwoot	Omnichannel customer engagement — live chat, email, social media inbox	MIT	chatwoot/chatwoot
Listmonk	listmonk	Newsletter and mailing list manager — bulk email campaigns, subscriber management	AGPL-3.0	listmonk/listmonk
Stalwart Mail	stalwart	All-in-one mail server — SMTP, IMAP, JMAP, POP3, CalDAV, CardDAV, WebDAV. Built-in DKIM/SPF/DMARC/ARC, DANE, MTA-STS. Written in Rust.	AGPL-3.0	stalwartlabs/mail-server

⚠ **Replaced: Poste.io → Stalwart Mail** — Poste.io had a proprietary license prohibiting third-party deployment. Stalwart Mail (AGPL-3.0) is the re-

placement: all-in-one mail server with native OIDC/Keycloak support (v0.11.5+), Management REST API with OpenAPI spec, and comprehensive protocol coverage (SMTP, IMAP, JMAP, POP3, CalDAV, CardDAV, WebDAV). 12k+ GitHub stars, written in Rust for performance and security.

1.2.3 File Storage & Collaboration (3)

Tool	Stack Key	Description	License	Docker Image
Nextcloud	nextcloud	File sync, sharing, office suite, calendar, contacts — the Swiss Army knife	AGPL-3.0	nextcloud
MinIO	minio	S3-compatible object storage — stores files, backups, attachments for other tools	AGPL-3.0	minio/minio
Documenso	documenso	Digital document signing — e-signature workflows, templates, audit trails	AGPL-3.0	documenso/documenso

1.2.4 Identity & Security (2)

Tool	Stack Key	Description	License	Docker Image
Keycloak	keycloak	Identity and access management — SSO across all tools, OIDC/SAML	Apache-2.0	quay.io/keycloak/keycloak
Vaultwarden	vaultwarden	Password manager (Bitwarden-compatible) — team credential sharing, autofill	AGPL-3.0	vaultwarden/server

1.2.5 Automation & Workflows (1)

Tool	Stack Key	Description	License	Docker Image
Activepieces	activepieces	No-code automation — drag-and-drop workflow builder, growing connector library	MIT	activepieces/activepieces

⚠ **Removed: n8n** — Sustainable Use License prohibits hosting as part of a paid service. ⚠ **Removed: Windmill** — AGPL with explicit additional restriction: "cannot sell, resell, serve Windmill as a managed service." ⚠ **Removed: Typebot** — Changed from AGPL to Fair Source License (FSL) in 2024. Prohibits competing products. Converts to Apache 2.0 after 2 years. **Note:** Typebot remains in our internal stack for LetsBe team use and close associates — just not deployed on customer VPS as part of the managed service.

1.2.6 Development (2)

Tool	Stack Key	Description	License	Docker Image
Gitea	gitea	Lightweight Git server — repos, issues, PRs, wiki, CI integration	MIT	gitea/gitea
Drone CI	gitea-drone	Continuous integration — pipeline-as-code, triggered by Gitea events	Apache-2.0	drone/drone

1.2.7 Databases & Analytics (3)

Tool	Stack Key	Description	License	Docker Image
NocoDB	nocodb	Airtable alternative — spreadsheet UI over any database, API-first	AGPL-3.0	nocodb/nocodb
Redash	redash	Data visualization — SQL queries, dashboards, scheduled reports	BSD-2	redash/redash

Tool	Stack Key	Description	License	Docker Image
Umami	umami	Privacy-focused web analytics — no cookies needed, GDPR-friendly	MIT	ghcr.io/umami-software/umami

1.2.8 AI & Chat (1)

Tool	Stack Key	Description	License	Docker Image
LibreChat	librechat	Multi-model AI chat interface — ChatGPT-style UI, supports Claude/GPT/local models	MIT	ghcr.io/danny-avila/librechat

1.2.9 CMS & Content (3)

Tool	Stack Key	Description	License	Docker Image
Ghost	ghost	Publishing platform — blogs, newsletters, membership, SEO-optimized	MIT	ghost
WordPress	wordpress	Content management system — the world's most popular CMS, massive plugin ecosystem	GPL-2.0	wordpress
Squidex	squidex	Headless CMS — API-first content management, multi-language, asset management	MIT	squidex/squidex

1.2.10 Business Tools (3)

Tool	Stack Key	Description	License	Docker Image
Cal.com	`calcom`	Scheduling — booking pages, calendar sync (Google/Outlook/CalDAV), team scheduling	AGPL-3.0	`calcom/cal.com`
Odoo	`odoo`	ERP suite — CRM, invoicing, inventory, HR, project management, 80+ modules	LGPL-3.0	`odoo`
Penpot	`penpot`	Design & prototyping — Figma alternative, real-time collaboration, SVG-native	MPL-2.0	`penpotapp/frontend`

⚠ **Removed: Invoice Ninja** — Elastic License 2.0 (not AGPL as previously listed). Prohibits providing as "hosted or managed service." **Replacement: Bigcapital** (AGPL-3.0, P1 expansion) covers invoicing + full double-entry accounting. Also considered: **InvoiceShelf** (AGPL-3.0, Docker-ready, Laravel/Vue) as a lighter invoicing-only alternative if Bigcapital is too heavy. Odoo invoicing module available as interim.

1.2.11 Monitoring & Maintenance (3)

Tool	Stack Key	Description	License	Docker Image
GlitchTip	`glitchtip`	Error tracking — Sentry-compatible, crash reporting, performance monitoring	MIT	`glitchtip/glitchtip`
Uptime Kuma	`uptime-kuma`	Uptime monitoring — HTTP/TCP/DNS checks, status pages, notifications	MIT	`louislam/uptime-kuma`
Diun	`diun`	Container update notifications — monitors Docker images for new releases	MIT	`crazymax/diun`

Note: Watchtower (Apache-2.0) was archived December 2025. Diun is the active replacement.

1.2.12 Other (1)

Tool	Stack Key	Description	License	Docker Image
Static HTML	`html`	Simple static website hosting — nginx serving customer's HTML/CSS/JS files	—	`nginx:alpine`

1.3 3. Expansion Catalog — Deep Evaluation by Business Domain

Each tool below has been vetted against our six selection criteria (§1), checked for overlap per our catalog philosophy, and deeply researched for **API completeness** (can the AI do everything?), **SSO/Keycloak support**, and **strategic justification**. Priority ratings:

- **P1 (High)** — Fills a major gap; strong API for AI automation; high SMB demand
- **P2 (Medium)** — Valuable addition; adequate API; complements existing tools
- **P3 (Lower)** — Nice to have; API gaps or maintenance concerns; niche use cases
- **REMOVED** — Failed research evaluation; does not meet requirements

1.3.1 3.1 CRM & Sales

Current coverage: Odoo (CRM module), Chatwoot (customer engagement). Gap: standalone lightweight CRM.

~~Twenty~~ — **REMOVED (was P1)**

Attribute	Detail
Status	**License incompatible with managed service deployment.**

Attribute	Detail
Why removed	Dual-licensed: files marked `/* @license Enterprise */` require a commercial license for production use. Without enterprise license, cannot be used to "manage customer data for a business" or "deployed in a commercial setting where it interacts with real clients or generates revenue." SSO is also behind the commercial license. Despite excellent API (95%), the production-use restriction is a hard blocker.

EspoCRM — Enterprise-Ready CRM | P1 (now primary CRM)

Attribute	Detail
Replaces	Salesforce, Pipedrive, HubSpot
License	AGPL-3.0 (changed from GPL-3.0 in v8.1; standard AGPL, no additional restrictions — "does not prevent you from using, modifying, or providing the open-source software to others")
Stars	1.8k+
API	REST — 90% coverage. Full CRUD for contacts, accounts, opportunities, tasks, calls, meetings, notes. **Email sending via API** (SMTP/OAuth). Custom entities supported. HMAC auth (most secure). No documented rate limits. OpenAPI spec available at `/api/v1/OpenApi`.
API Gaps	No GraphQL. Reporting API covers grid reports with aggregation but not custom visualizations.
SSO	☑ **Native OIDC** — documented at `/administration/oidc/`. User auto-creation on first login. Auto-team mapping from IdP groups.
Keycloak	☑ **Supported** — works with `client_secret_post` auth method. Users/teams auto-mapped from Keycloak groups. Note: Espo's built-in 2FA disabled when OIDC active (use Keycloak 2FA instead).

Attribute	Detail
Why include	**Only CRM with native Keycloak support.** Complete email sending API (critical for CRM workflows). Mature codebase (10+ years). HMAC auth is more secure than API keys. Auto-team mapping from IdP groups aligns perfectly with privacy-first multi-tenant model. Better for regulated industries.
AI can do	Everything Twenty can do PLUS send emails, manage calendar, run reports with aggregation, manage BPM workflows.
AI cannot do	Advanced custom visualizations (push to Redash).
Priority rationale	Upgraded to P1. Native Keycloak + email API makes it the most enterprise-ready CRM. Smaller community but more mature for SSO-required deployments.

Corteza — Low-Code CRM Platform | P2

Attribute	Detail
Replaces	Salesforce, Dynamics 365
License	Apache-2.0
Stars	1.5k+
API	REST — 70% effective coverage. No pre-built CRM entities; must design modules/fields via low-code UI first, then API works on those custom records. OAuth2 client credentials auth. No rate limits documented.
API Gaps	Requires UI-based schema design before API is useful. No pre-built pipeline, no pre-built contact model. Reporting is dashboard-based, not API-queryable.
SSO	**⬤ OIDC + SAML both native** — best-in-class SSO. Add provider in Admin panel.
Keycloak	**⬤ Fully supported** — both OIDC and SAML work.

Attribute	Detail
Why include	Best SSO support (OIDC + SAML). Low-code flexibility for custom business processes. Apache 2.0 (least restrictive license). GDPR-native design. Good for companies with non-standard CRM workflows.
AI can do	CRUD on any pre-defined module. Trigger workflows. Send emails via workflow engine.
AI cannot do	Design schema (UI-only). Create reports. Work without pre-built schema (2-4 week initial setup required).
Priority rationale	P2 because it requires significant upfront schema design and smaller community. Excellent SSO but not AI-first. Best for teams with custom business processes who invest in initial setup.

1.3.2 3.2 Accounting & Invoicing

Current coverage: Odoo (invoicing module). Gap: standalone invoicing + full double-entry accounting. Invoice Ninja removed (Elastic License). **Bigcapital (P1) replaces both Invoice Ninja and Akaunting** — covers invoicing, expenses, and full double-entry accounting in one tool.

Bigcapital — Double-Entry Accounting | P1

Attribute	Detail
Replaces	QuickBooks, Xero
License	AGPL-3.0
Stars	3k+

Attribute	Detail
API	REST — 85% coverage. Full CRUD for invoices, expenses, payments, clients, vendors, bills, products, tax rates. **Chart of accounts, journal entries, financial statements** (P&L, Balance Sheet, Cash Flow, Trial Balance, General Ledger). Bank account management. Inventory tracking. Auth: Bearer token (JWT/API key). Postman collection available.
API Gaps	Bank reconciliation automation unclear. AR/AP detail endpoints incomplete. Some endpoints underdocumented (discover via Postman).
SSO	☐ No native OIDC/SAML. Built-in user/password + API key only.
Keycloak	☐ Not supported. **Workaround:** oauth2-proxy reverse proxy (2-week sprint).
Why include	**Only OSS tool with true double-entry accounting + comprehensive API.** Multi-tenant architecture (single instance serves 30+ client books). Real-time financial statements. Inventory integration (rare in OSS). AI agents can autonomously create invoices, journal entries, generate financial reports. Compliance-grade accounting engine.
AI can do	Create invoices/bills, manage expenses, post journal entries, generate P&L/Balance Sheet/Cash Flow, manage chart of accounts, track inventory.
AI cannot do	Complex bank reconciliation (partial). Custom report visualization (push to Redash).
Priority rationale	P1 — fills the single biggest gap in our stack (real accounting). No SSO but solvable with proxy.

~~Akaunting~~ — REMOVED (was P2)

Attribute	Detail
Status	**License incompatible with managed service deployment.**
Why removed	BSL 1.1 (not GPL-3.0 as previously listed). Explicitly prohibits providing "to third parties as an Accounting Service." Direct conflict with LetsBe's model. Converts to GPL-3.0 after change date (4 years from publication).

~~Crater~~ — REMOVED

Attribute	Detail
Status	**PROJECT ABANDONED** — announced August 2023, no active development for 2+ years. Security patches only.
Why removed	API too limited (4.5/10 — no journals, COA, financial reports). No SSO. Security risk from lack of maintenance. Rate limit: 180 req/hr (restrictive). Community has moved to Invoice Ninja alternatives. **Do not integrate.**

1.3.3 3.3 Project Management & Tasks

Current coverage: Odoo (project module), NocoDB (database views). Gap: dedicated PM tool.

Plane — Modern Project Management | P1

Attribute	Detail
Replaces	Jira, Linear, Asana, Monday.com
License	AGPL-3.0
Stars	32k+

Attribute	Detail
API	REST — 95% coverage. Full CRUD for projects, issues, cycles (sprints), modules, comments, labels, assignees, file attachments. Kanban/list/gantt/spreadsheet views. OAuth 2.0 + API key auth. Cursor-based pagination. HMAC-signed webhooks. Typed SDKs (Node.js, Python). Rate limit: 60 req/min.
API Gaps	No native time tracking. Minor UI-only features.
SSO	☐ **Native OIDC** via God Mode (`/god-mode/authentication/oidc/`).
Keycloak	☐ **Fully supported** — reference integration documented.
Why include	Best API completeness in PM category (95%). Modern UI matches Linear/Asana experience. Native OIDC/Keycloak. Multi-view flexibility (Gantt, Kanban, Timeline, Spreadsheet). Active community (32k stars). Python + Node.js SDKs enable rapid AI agent development.
AI can do	Create/manage projects, issues, sprints/cycles, comments, labels, assignments, file attachments. Query all views.
AI cannot do	Time tracking (not built-in). Advanced Gantt manipulation.
Priority rationale	P1 — #1 missing tool for SMBs. Strongest API + SSO combo in PM.

Leantime — PM for Non-PMs | P2

Attribute	Detail
Replaces	Monday.com, Basecamp, Asana (basic)
License	AGPL-3.0
Stars	4.5k+

Attribute	Detail
API	JSON-RPC (not REST) — 70% coverage. Single endpoint `/api/jsonrpc`. Projects, tasks, kanban, table/list/calendar views. **Built-in time tracking** (timers + timesheets). Auth: API key via headers.
API Gaps	JSON-RPC is unconventional (harder for AI agents trained on REST). No explicit sprint/cycle API. Documentation sparse.
SSO	⬜ **OIDC supported** (v2.1.9+). LDAP also supported.
Keycloak	⬜ **Supported** — requires Provider URL, Client ID, Client Secret. Works with x5c certificates.
Why include	**Only PM tool with built-in time tracking + Keycloak support.** Designed for non-PMs (neurodivergent-friendly UX using behavioral science). Low overhead, fast deployment. Differentiator for SMBs with non-traditional teams.
AI can do	Manage tasks, track time, kanban operations, basic project management.
AI cannot do	Sprint planning (limited API). Complex Gantt manipulation.
Priority rationale	P2 — time tracking differentiator, OIDC ready, but JSON-RPC adds AI integration complexity.

Vikunja — Lightweight Task Management | P2

Attribute	Detail
Replaces	Todoist, TickTick, Trello
License	AGPL-3.0
Stars	5k+

Attribute	Detail
API	REST + OpenAPI/Swagger — 75% coverage. Projects (lists), tasks, kanban, gantt, table views, comments, labels, assignees, file attachments, webhooks. CalDAV support. Auto-generated Swagger docs at `/api/v1/docs`. JWT + API token auth.
API Gaps	No time tracking. No formal sprint/cycle planning.
SSO	☐ **Native OIDC** — well-documented with team auto-assignment from OIDC claims (v0.24.0+).
Keycloak	☐ **First-class support** — dedicated docs + Authentik/Synology examples. Email/username attribute linking for existing accounts.
Why include	Task-centric (not project-centric) — good for distributed teams. CalDAV support enables calendar integration. Strong Keycloak integration with team auto-assignment. Lightweight resource footprint. Conventional REST API ideal for AI agents.
AI can do	Manage tasks, labels, projects, kanban boards. CalDAV sync.
AI cannot do	Time tracking. Sprint planning.
Priority rationale	P2 — excellent Keycloak support but lightweight feature set vs. Plane.

OpenProject — Enterprise PM | P2

Attribute	Detail
Replaces	Jira Server, MS Project, enterprise PM suites
License	GPL-3.0
Stars	12.8k+

Attribute	Detail
API	REST (APIv3) + HAL+JSON HATEOAS — 90% coverage. Projects, work packages, agile boards, Gantt, **time tracking**, wikis, file attachments, comments, custom fields, roles/permissions. OAuth2 + session + basic auth. OpenAPI 3 spec at `/api/v3/spec.json`. Swagger UI at `/api/docs`.
API Gaps	HATEOAS adds verbosity (more complex for AI parsing). BCF API (building info) is niche.
SSO	☑ **OIDC + SAML both supported** (v15+). Group synchronization from Keycloak.
Keycloak	☑ **Full support** — OIDC discovery endpoint, SAML metadata, group sync.
Why include	Most feature-complete OSS PM tool. **Time tracking + Gantt + OIDC/SAML + group sync** = enterprise-grade. 9+ years of development. Community Edition genuinely free. Best for SMBs needing traditional + agile hybrid.
AI can do	Manage projects, work packages, sprints, time entries, wiki pages, comments, file attachments.
AI cannot do	Some UI-only configuration. HATEOAS requires more sophisticated API client.
Priority rationale	P2 — most powerful but most complex. Better for enterprise-oriented SMBs than startup-style teams.

~~Focalboard~~ — REMOVED (was P3)

Attribute	Detail
Status	**Maintenance uncertain** — Aug 2024 call for community maintainers. Standalone version unmaintained; moving to Mattermost plugin architecture.

Attribute	Detail
Why removed	API is 50% complete and underdocumented. **No SSO support** (no OIDC, SAML, or LDAP). No time tracking. No sprints. Disqualified for privacy-first platform.

1.3.4 3.4 Knowledge Base & Wiki

Current coverage: Nextcloud (limited notes/wiki), Gitea (repo wiki). Gap: proper knowledge management.

BookStack — Structured Wiki | P1

Attribute	Detail
Replaces	Confluence, Notion (for documentation)
License	MIT
Stars	16k+
API	REST — 95% coverage. Full CRUD for shelves, books, chapters, pages, comments. Search API with full-text indexing. Tag-based search. Role/user/permission management via API. File attachment management (multipart + base64). Portable ZIP export. Built-in API docs at `/api/docs`. Rate limit: 180 req/min (configurable to 1500). Auth: API token.
API Gaps	No real-time collaboration. API token scoping is basic (no granular OAuth scopes).
SSO	☑ **OIDC + SAML 2.0 both native** — auto-discovery of endpoints. Tested with Keycloak, Okta, Auth0.
Keycloak	☑ **Supported** — OIDC auto-discovery works. Known issue: refresh token handling requires increased token lifetime in Keycloak. SAML also works.

Attribute	Detail
Why include	**Highest API completeness in KB category** (95%). Clear hierarchy (Books/Chapters/Pages) mimics real-world documentation structure. Both OIDC + SAML native. MIT license (least restrictive). Low deployment complexity (PHP/Laravel). AI agents can fully manage entire knowledge base lifecycle.
AI can do	Create/update/delete all content levels. Manage hierarchy. Search full-text. Manage permissions per entity. Handle attachments. Export content.
AI cannot do	Real-time collaborative editing (single-user editing model).
Priority rationale	P1 — best API for AI automation. Structured hierarchy is ideal for procedural docs, runbooks, SOPs.

~~Outline~~ — REMOVED (was P1)

Attribute	Detail
Status	**License incompatible with managed service deployment.**
Why removed	BSL 1.1 with Additional Use Grant that explicitly prohibits "Document Service" — defined as "a commercial offering that allows third parties to access the functionality by creating teams and documents." This is exactly what LetsBe does. Change Date to Apache 2.0 is January 27, 2030 — too far out. Despite excellent API (85%), SSO, and Keycloak support, the license is a hard blocker. **Revisit after January 2030 when Apache 2.0 conversion takes effect.**

Wiki.js — Git-Backed Wiki | P2

Attribute	Detail
Replaces	Confluence, GitBook
License	AGPL-3.0
Stars	25k+
API	GraphQL — **40% effective coverage**. Page queries work but **page creation/management API is incomplete**. Community feature request #5138 still open. No documented REST endpoints for full CRUD. Search API underdocumented. Permission/group APIs limited.
API Gaps	**Critical: AI agents cannot fully automate page lifecycle.** Form creation, hierarchy management, and user provisioning require UI interaction.
SSO	**OIDC native** — Keycloak integration confirmed working.
Keycloak	**Works via OIDC** — community guide available. No automatic group provisioning (feature request).
Why include	Unique: Git sync stores content as Markdown files (natural backup + version control). Best for developer/technical teams. Node.js (lightweight).
AI can do	Query pages, basic search.
AI cannot do	**Create/manage pages reliably via API.** Manage permissions. Manage users/groups. This is a major limitation for AI-first platform.
Priority rationale	P2 — OIDC works but API incompleteness violates our "AI does everything" requirement. Only suitable for dev teams with Git workflow.

AFFiNE — REMOVED (was P2)

Attribute	Detail
Status	Active development (44k stars) but **not enterprise-ready**.

Attribute	Detail
Why removed	**No public REST/GraphQL API** for programmatic automation (GitHub issue #1013 still open). SSO/Keycloak not supported (feature request #6464). Flat document structure. File management has reported issues (#8537). Too immature for production knowledge management. Local-first architecture conflicts with centralized AI agent model. **Revisit in 12-18 months when API and SSO ship.**

1.3.5 3.5 Helpdesk & Support Tickets

Current coverage: Chatwoot (real-time omnichannel chat). Gap: structured ticket management with SLAs. **Note:** Chatwoot and Zammad are complementary — Chatwoot handles *real-time messaging*, Zammad handles *structured support tickets*. See §1 catalog philosophy.

Zammad — Full Helpdesk | P1

Attribute	Detail
Replaces	Zendesk ($49-165/agent/mo), Freshdesk, Help Scout
License	AGPL-3.0
Stars	4.5k+
API	REST — **95% coverage. "API First" philosophy: anything available via UI is available via API.** Full CRUD for tickets, articles (threaded responses), ticket linking, priorities, states, SLAs, knowledge base. Group/role/agent management. Search/query. Webhooks (triggers + schedulers). n8n integration. Auth: Token-based (recommended), HTTP Basic, OAuth 2.0. Pagination with hard caps. Python/PHP client libraries.
API Gaps	Webhook retry logic underdocumented. KB search granularity could be deeper.

Attribute	Detail
SSO	☐ **SAML 2.0 native** — import IdP metadata, auto-create users on first login. **OIDC native** (v6.5+).
Keycloak	☐ **Fully supported** — RS256 certificate from Keycloak, SAML metadata, or OIDC as Relying Party. Email/name/role synchronization.
Why include	**"API First" = AI agents can manage 100% of ticket lifecycle.** Multi-channel consolidation (email, chat, social). Native OIDC + SAML + Keycloak. Mature codebase (10+ years). Eliminates per-seat SaaS costs. Complete SLA management.
AI can do	Create/manage/close tickets, assign agents, manage SLAs, search knowledge base, manage customers, automate workflows, generate reports. Everything.
AI cannot do	Nothing significant — API-first design means full coverage.
Priority rationale	P1 — non-negotiable for workforce platform. Highest API completeness + best SSO in helpdesk category.

FreeScout — Shared Inbox Helpdesk | P2

Attribute	Detail
Replaces	Help Scout ($15-40/user/mo)
License	AGPL-3.0
Stars	3k+
API	REST — 80% coverage. Conversations, replies, assignments, mailbox management. Webhooks for events. Auth: API key (`X-FreeScout-API-Key`). No rate limits. **Note:** API requires paid/community "API & Webhooks" module.
API Gaps	No SLA management API. Limited workflow automation endpoints. No KB creation API.
SSO	☐ **SAML 2.0 via module** — auto-user creation, attribute mapping.

Attribute	Detail
Keycloak	⚠ Possible via SAML bridge, not native OIDC.
Why include	Simpler than Zammad — focused on email-based shared inbox paradigm. Better UX for small support teams who don't need formal ticketing. No per-agent licensing.
AI can do	Create/manage conversations, assign agents, track status, manage mailboxes.
AI cannot do	SLA management. Advanced workflows. Knowledge base management.
Priority rationale	P2 — good email-centric alternative but less "AI-complete" than Zammad (80% vs 95%).

~~Peppermint~~ — REMOVED (was P3)

Attribute	Detail
Why removed	**No official API documentation.** Endpoints unclear, external ticket creation undocumented. No SSO support (no OIDC, SAML, or LDAP). Immature API (65% estimated). 1.5k stars (smallest community). Fails "AI does everything" requirement.

1.3.6 3.6 Forms, Surveys & Data Collection

Current coverage: None (Typebot removed from customer catalog; retained for internal use). Gap: form/survey builder.

Formbricks — Survey Platform | P1

Attribute	Detail
Replaces	Typeform ($25-99/mo), SurveyMonkey, Qualtrics, JotForm
License	AGPL-3.0
Stars	9k+

Attribute	Detail
API	REST — 95% coverage. Management API: create/update/delete surveys, manage questions/types/welcome cards/thank-you cards/languages/branching logic. Response API: create/retrieve/update responses, partial submission capture. Conditional logic API (jump actions, show/hide). CSV export. 100+ templates accessible via API. JS/TS SDKs for React/Vue/Svelte. Rate limiting via headers (X-RateLimit-Limit/Remaining). Auth: API key (Management), no auth needed for Public Client API.
API Gaps	None significant — comprehensive forms/survey coverage.
SSO	☐ **SAML 2.0 supported** — Entity ID configuration, ACS URL. Works in self-hosted.
Keycloak	☐ **Works via SAML** — Keycloak as SAML IdP. Native OIDC not yet available (feature request #6297).
Why include	**Best-in-class survey/form API.** Conditional logic fully exposed via API = AI agents can build complex branching surveys autonomously. Privacy-first: self-hosted, no tracking. Unlimited responses (self-hosted). In-app surveys + website popups + link surveys = multi-channel data collection.
AI can do	Create surveys from templates, build custom forms with conditional logic, manage responses, export data, configure NPS/CES/CSAT.
AI cannot do	Nothing significant for forms/surveys.
Priority rationale	P1 — highest API completeness in forms category. Privacy-first alignment. SAML works for SSO.

~~**Heyform — REMOVED (was P2)**~~

Attribute	Detail
Why removed	**No official REST API documentation.** Form creation API underdeveloped. Conditional logic not exposed via API. No SSO (OIDC requested in Discussion #58, not implemented). API score ~2/10 for AI agents. Formbricks is strictly superior on every dimension.

LimeSurvey — Research-Grade Surveys | P2

Attribute	Detail
Replaces	SurveyMonkey ($99-384/yr), Qualtrics, Google Forms
License	GPL-2.0
Stars	2.8k+
API	JSON-RPC (RemoteControl 2) — 80% coverage. Survey creation/management, question management, response retrieval/export. Session key auth. **REST API listed as "TODO — under development."** 3rd-party REST wrapper exists (machitgarha/limesurvey-rest-api).
API Gaps	JSON-RPC is archaic vs REST/GraphQL. REST API still not available. Requires workarounds for modern integrations.
SSO	**LDAP built-in** (requires PHP LDAP). SAML via commercial/community plugins. OAuth2 via 3rd-party plugin for Keycloak.
Keycloak	⚠ Via 3rd-party OAuth2 plugin (BDSU/limesurvey-oauth2). Not native.
Why include	15+ years of survey maturity. Massive customization via JS/HTML editing. **80+ language support** (unique). Multi-language surveys out-of-box. Best for research/academic contexts or international SMBs.

Attribute	Detail
AI can do	Create surveys, manage questions, retrieve/export responses.
AI cannot do	Complex operations easily (JSON-RPC adds friction). REST-based automation.
Priority rationale	P2 — mature but dated API. Choose if multi-language surveys are critical. Otherwise Formbricks is superior.

1.3.7 3.7 HR & People Management

Current coverage: Odoo (HR module). Gap: standalone HR.

OrangeHRM — HR Management | P2

Attribute	Detail
Replaces	BambooHR ($99-299/mo), Workday, ADP
License	GPL-3.0
Stars	850+
API	REST — 85% coverage. OAuth 2.0 (client_credentials). Employee CRUD, leave management, attendance, recruitment/ATS, performance reviews (360-degree), time tracking (clock in/out, timesheets), documents. Token valid 3600s.
API Gaps	Benefits/compensation may lack deep API coverage. Documentation could be clearer.
SSO	⬜ **OIDC native** — supports Google, Microsoft, Okta, Keycloak via OpenID Connect.
Keycloak	⬜ **Supported** via OIDC.
Why include	**Only OSS HR platform with complete feature set** (employees, leave, recruitment, reviews, time). 1M+ users worldwide. OIDC/Keycloak support. Modular design. No per-user licensing.

Attribute	Detail
AI can do	Manage employee records, process leave requests, track attendance, manage recruitment pipeline, run performance reviews.
AI cannot do	Some advanced HR workflows (benefits administration).
Priority rationale	P2 — important if HR management is in scope but not every SMB needs standalone HR (Odoo module covers basics).

1.3.8 3.8 Marketing & Social Media

Current coverage: Listmonk (email), Ghost (newsletters), WordPress (content). Gap: social media management, link management.

Dub — Link Management | P2 (downgraded from P1)

Attribute	Detail
Replaces	Bitly, Rebrandly
License	AGPL-3.0
Stars	19k+
API	REST — 80% coverage. Link creation/management/deletion. Analytics (clicks, leads, sales). Referrer tracking. Custom domains, geo-targeting, device targeting. Password protection. Auth: Bearer token with scoped permissions. Rate limit: 60 req/min (free tier).
API Gaps	Conversion tracking limited to paid Business+ tier on cloud (verify self-hosted parity). No A/B testing.
SSO	⚠ **SAML only on enterprise SaaS tier.** Self-hosted version has no enterprise SSO out-of-box. Bearer token auth only.
Keycloak	⬜ Not supported for self-hosted. Would require custom auth layer.
Why include	Full link management platform with analytics. Device/geo-targeting useful for AI-driven campaigns.

Attribute	Detail
AI can do	Create/manage short links, track analytics, manage custom domains.
AI cannot do	SSO login. A/B testing. Advanced conversion tracking (tier-dependent).
Priority rationale	Downgraded to P2 — no self-hosted SSO is a gap. Link management is useful but not critical path.

Shlink — URL Shortener | P3 (downgraded from P2)

Attribute	Detail
Replaces	Bitly (free tier), TinyURL
License	MIT
Stars	3.2k+
API	REST — 60% coverage. Short URL CRUD, custom slugs, visit analytics (geo, referrer, device), domain/tag management. API key + RBAC auth.
API Gaps	**No webhook support.** No bulk operations API. No link preview customization. Limited metadata.
SSO	☐ No SSO support. API key + basic auth for web UI only.
Keycloak	☐ Not supported.
Why include	Lightweight, zero-subscription URL shortener. Privacy-friendly. Works offline. Good for basic link tracking.
Priority rationale	Downgraded to P3 — Dub is superior in every dimension except simplicity. No SSO, no webhooks.

Mixpost — Social Media Management | P2

Attribute	Detail
Replaces	Buffer, Hootsuite, Later, Sprout Social (basic)
License	MIT
Stars	1.2k+

Attribute	Detail
API	REST (via community addon) — 70% coverage. Post creation/scheduling/publishing, account management, analytics querying, team management, approval workflows. Laravel Sanctum tokens. Rate limit: 60 req/min (configurable). HMAC webhook validation. n8n integration bridges gaps.
API Gaps	Limited analytics API depth. No audience insights. No social listening.
SSO	⬜ No native OIDC/SAML. Laravel Sanctum (token-based) only.
Keycloak	⬜ Not supported. Would require custom middleware.
Why include	All-in-one social media management (scheduling + publishing + analytics + approvals) with zero recurring cost. n8n automation compensates for API gaps. Content approval workflow useful for teams.
AI can do	Create/schedule/publish posts across platforms, manage accounts, trigger approval workflows.
AI cannot do	Advanced analytics. Audience insights. Social listening. SSO login.
Priority rationale	P2 — strong for SMB marketing but weak SSO story and smaller community.

~~LinkStack~~ — REMOVED (was P3)

Attribute	Detail
Why removed	**No public REST/GraphQL API.** UI-only platform. AI agent readiness: 0/10. Cannot automate link updates, analytics, or user management. No SSO. Fails "AI does everything" requirement completely.

1.3.9 3.9 E-Commerce & Payments

Current coverage: None beyond Odoo (sales module). Gap: headless storefront.

Medusa — Headless Commerce (REST) | P1

Attribute	Detail
Replaces	Shopify Plus API, BigCommerce headless, WooCommerce
License	MIT
Stars	27k+
API	REST — 90% coverage. Dual-endpoint (Store APIs + Admin APIs). Products (CRUD, bulk import, variants), orders (creation, fulfillment, payment, status), customers, carts/checkout, inventory (multi-warehouse), promotions, payments (Stripe, PayPal, custom), shipping. Auth: Bearer token/session.
API Gaps	Limited webhook filtering. No delivery guarantees on webhooks. Batch operation size limits.
SSO	⚠ OAuth2 available via custom auth modules (Okta, Google, Azure documented). Not built-in.
Keycloak	⚠ Possible via custom plugin (medium complexity). Plugin architecture supports it.
Why include	**Most complete REST e-commerce API.** JavaScript/Node.js native (TypeScript). Multi-channel (web, mobile, B2B, marketplace). Modular plugin system. Real-time inventory sync. Multi-warehouse. Developer SDK. 27k stars = large community.
AI can do	Manage entire store: products, orders, customers, inventory, payments, shipping, promotions.
AI cannot do	Complex SSO (requires plugin). Frontend rendering (headless = BYO frontend).
Priority rationale	P1 — essential e-commerce backbone. REST API is more AI-friendly than Saleor's GraphQL.

Saleor — Headless Commerce (GraphQL) | P1 (upgraded from P2)

Attribute	Detail
Replaces	Shopify Plus, commercetools
License	BSD-3
Stars	21k+
API	GraphQL-first — 85% coverage. Full mutations for products/variants, orders, customers, cart/checkout, inventory, promotions, taxes (multi-jurisdiction), webhooks (event-driven). Auth: OIDC (external provider) + API tokens.
API Gaps	GraphQL learning curve steeper than REST. Limited subscription management. Bulk operation performance limits.
SSO	⬜ **OIDC built-in** — configurable via dashboard. Turnkey Keycloak via OIDC plugin.
Keycloak	⬜ **Fully supported** — native OIDC plugin integration.
Why include	**Superior SSO/Keycloak vs. Medusa.** Enterprise-grade tax/shipping rules (multi-jurisdiction). GraphQL enables efficient batching for complex queries. Python/Django backend enables data science teams. Event-driven webhook architecture.
AI can do	Same as Medusa: full store management. GraphQL batching enables more efficient complex queries.
AI cannot do	Simple REST calls (GraphQL adds complexity).
Priority rationale	Upgraded to P1 — **Offer both Medusa (REST, simpler) and Saleor (GraphQL, SSO-native, enterprise).** Let the customer choose based on their needs. This is a justified overlap: different API paradigms and different SSO stories.

1.3.10 3.10 Low-Code App Builders

Current coverage: NocoDB (spreadsheet UI). Gap: full low-code app builder. Windmill removed (managed service prohibition). *(Baserow was evaluated but excluded — NocoDB covers the no-code database niche.)*

ToolJet — Low-Code Platform (AI-Native) | P1 (upgraded from P2)

Attribute	Detail
Replaces	Retool, Appsmith, Internal.io
License	AGPL-3.0
Stars	33k+
API	REST + JavaScript/Python — 90% coverage. Application management, workflow automation (60+ components), user/team management, database queries (ToolJet Database = PostgreSQL-based), API integrations (custom REST, GraphQL, gRPC). **75+ data source connectors. Native AI agents (Agent Node) + LLM integration (GPT, Hugging Face).** API key auth. Webhook/cron triggers.
API Gaps	None significant for AI agents. Mature feature set.
SSO	✅ **Native OIDC** — explicit Keycloak support documented. Authorization Code + PKCE flows.
Keycloak	✅ **Fully supported** — dedicated setup guide.
Why include	**Best low-code platform for AI agents in 2026.** Native LLM integration. 75+ data sources. Multiplayer editing. AI app generation from natural language. JavaScript/Python for custom logic. Community edition = unlimited users.
AI can do	Build internal tools, connect to databases, create UIs, run automations, manage users. Native AI agent capabilities.
AI cannot do	Nothing significant — most AI-ready low-code platform.

Attribute	Detail
Priority rationale	Upgraded to P1 — **primary low-code choice over Budibase** due to superior AI agent maturity, more connectors, and multiplayer editing.

~~Budibase~~ — REMOVED (was P2)

Attribute	Detail
Status	**License incompatible with managed service deployment.**
Why removed	Self-hosted terms (updated Feb 2025) explicitly prohibit "providing the source-available software to third parties as a hosted or managed service where the service provides users with access to any substantial set of the features or functionality of the software." Direct conflict with LetsBe's model. Also has 20-user limit on free tier.

~~AppFlowy~~ — REMOVED (was P2)

Attribute	Detail
Why removed	**No public REST/GraphQL API** (GitHub issue #1013 still open). AI agent readiness: 0/10. No SSO support. Local-first architecture conflicts with centralized AI agent management. 60k stars but not enterprise-ready for our use case. **Revisit when public API ships.**

1.3.11 3.11 Communication — Extended

Current coverage: Stalwart Mail (email server), Chatwoot (customer chat), Listmonk (newsletters). Gap: internal team messaging.

Rocket.Chat — Team Messaging | P1

Attribute	Detail
Replaces	Slack, Microsoft Teams
License	MIT
Stars	41k+
API	REST + Realtime (DDP) — 90% coverage. Messages, channels, users, rooms, bots, file uploads/downloads, admin operations. Real-time via DDP alongside REST. Configurable rate limiter with x-ratelimit headers (bypassable with `api-bypass-rate-limit` permission). Token-based + OAuth auth.
API Gaps	Some admin operations are complex. Rate limiting configuration non-trivial.
SSO	⬛ **OIDC + SAML both supported** — auto-group mapping to rooms. Role synchronization (Merge Roles from SSO). RSA_SHA1 signature algorithm for SAML.
Keycloak	⬛ **Fully supported** — battle-tested with detailed setup guides. Group mapping + role sync.
Why include	**Best messaging option for privacy-first platform.** Built-in E2EE (end-to-end encryption). 180+ custom permissions. Advanced threads. Live chat widget for external communication. Omnichannel capabilities. White-labeling. Most mature, actively developed (19 GSoC 2025 projects).
AI can do	Send/read messages, manage channels, manage users, bots, file sharing, search, admin operations.
AI cannot do	Some advanced admin configuration (UI-only).
Priority rationale	P1 — critical for internal communications. E2EE + Keycloak + comprehensive API.

Mattermost — DevOps-Focused Messaging | P2

Attribute	Detail
Replaces	Slack (for dev teams), Microsoft Teams
License	MIT (Team) + Proprietary (Enterprise)
Stars	31k+
API	REST (OpenAPI-spec) — 80% coverage. Channels, posts, users, teams, files, plugins. Plugin architecture extends API. Rate limiting with X-Ratelimit headers (not intended for >500 users).
API Gaps	Rate limiting limitations at scale. No real-time protocol as clean as Rocket.Chat's DDP.
SSO	☐ **OIDC + SAML 2.0** — Keycloak, Okta, Azure, Auth0, etc.
Keycloak	☐ **Supported** — requires client mappers for OIDC compatibility. SAML uses RSA_SHA1.
Why include	Developer-centric: GitHub/GitLab/Jira/Jenkins playbooks. Playbooks for incident response. Boards for project management. Better for engineering teams.
AI can do	Send/read posts, manage channels/teams, file uploads, search, plugin interactions.
AI cannot do	**No end-to-end encryption** (only in-transit/at-rest). Less privacy-forward than Rocket.Chat.
Priority rationale	P2 — strong alternative for DevOps-heavy teams. Less privacy-first than Rocket.Chat.

Element/Synapse — Federated Messaging | P3 (downgraded)

Attribute	Detail
Replaces	Slack (decentralized), Signal
License	AGPL-3.0 (changed from Apache-2.0 in 2023, Synapse v1.99+)
Stars	11k+ (Synapse)

Attribute	Detail
API	Matrix Client-Server API (v1.14+) — 70% coverage. Messages, rooms, users, sync, file uploads. Protocol-level API (less business-logic than Rocket.Chat/Mattermost).
API Gaps	Slower API evolution (protocol-bound). Less business-logic endpoints. More operational complexity (federation requires DNS/reverse proxy).
SSO	⚠ **OIDC transitioning** — Matrix Authentication Service (MAS) moving to industry-standard OAuth2/OIDC. Not fully native yet.
Keycloak	⚠ Possible via MAS but not production-ready for all clients.
Why include	Federation = communicate across homeservers (unique). E2EE by default. Open protocol. Used by German healthcare (Ti-Messenger) — credibility signal. Long-term strategic investment.
Priority rationale	Downgraded to P3 — API maturity lag, federation complexity, OIDC still transitioning. Strategic long-term but not production-ready for our v1.

1.3.12 3.12 Scheduling & Booking — Extended

Current coverage: Cal.com (excellent). Gap: none critical.

Easy!Appointments — Appointment Scheduling | P3

Attribute	Detail
Replaces	Calendly (basic), Acuity Scheduling
License	GPL-3.0
Stars	3.3k+
API	REST — 80% coverage. Appointments CRUD, services, staff, customers. Google Calendar bidirectional sync. OpenAPI/Swagger UI. No rate limits documented.

Attribute	Detail
API Gaps	Narrow business logic (appointment-only). No employee scheduling beyond availability.
SSO	⬚ **No SSO support** — local username/password only. Would require oauth2-proxy wrapper.
Keycloak	⬚ Not supported.
Why include	Niche appointment booking with Google Calendar sync. Lightweight PHP backend. Embedded booking widget.
Priority rationale	P3 — Cal.com already covers scheduling excellently. No SSO is a gap. Only add if specific appointment-booking workflow needed beyond Cal.com.

1.3.13 3.13 Backup & Storage

Current coverage: MinIO (object storage), Netcup snapshots. Gap: application-level backup management.

Duplicati — Encrypted Backup | P2

Attribute	Detail
Replaces	Backblaze Personal, Carbonite, Acronis
License	MIT (changed from LGPL-2.1 in March 2024)
Stars	11k+
API	REST — 60% coverage. Backup management, scheduling, restoration via `/api/v1/*` endpoints. CLI has more options than API. Retention policies (–keep-time, –keep-versions).
API Gaps	API primarily for UI integration, not full lifecycle automation. CLI more powerful.
SSO	⚠ **OIDC is Enterprise feature only** (requires paid license). Open-source version: no SSO.

Attribute	Detail
Keycloak	⚠ Enterprise only.
Why include	Supports any cloud backend (B2, S3, Azure, Google Drive). **Client-side encryption** (zero-knowledge backups). Deduplication + compression. Incremental backups. Critical for backup/DR in privacy-first platform.
AI can do	Schedule backups, monitor status, trigger restoration.
AI cannot do	Complex restore operations (CLI better). SSO login on open-source.
Priority rationale	P2 — critical infrastructure but API limitations and SSO paywall are concerns. Consider for infrastructure tier (not customer-facing).

1.3.14 3.14 Media & Asset Management

Current coverage: Nextcloud (files), MinIO (storage). Gap: media-specific management.

Immich — Photo/Video Management | P2

Attribute	Detail
Replaces	Google Photos, Amazon Photos, Apple iCloud
License	AGPL-3.0
Stars	55k+
API	REST (OpenAPI) — 90% coverage. Upload, organize, search, tag, share, facial recognition. Fine-grained API key permissions (asset.read/upload, album.read/write, library.read, user.read). External library support. Partner sharing. Auto-generated TypeScript + Dart SDKs.
API Gaps	None significant for photo/video operations.
SSO	⬚ **OIDC native** via Keycloak. Also works with Authelia, authentik.

Attribute	Detail
Keycloak	⬚ **Supported** — known issue: mobile app OAuth has code verifier errors with Keycloak (web works reliably).
Why include	Self-hosted Google Photos replacement. AI-powered search + facial recognition. Timeline/memories. Mobile apps (iOS/Android). Privacy-first: all media on-premise. 55k stars = fastest growing project in catalog.
AI can do	Upload, organize, search (including ML-powered), tag, share, manage albums, manage libraries.
AI cannot do	Mobile SSO (web-only OIDC currently reliable).
Priority rationale	P2 — excellent tool but photo/video management isn't core SMB workflow. Critical for privacy-conscious teams replacing Google Photos.

Paperless-ngx — Document Management | P2

Attribute	Detail
Replaces	Evernote, OneNote, Google Drive (document management), Adobe Scan
License	GPL-3.0
Stars	23k+
API	REST (versioned v1, v2+) — 80% coverage. Document upload, OCR (Tesseract, 100+ languages), search, tag, organize by correspondent/type, bulk operations. Granular permissions. Consumption workflows (auto-classify). Auth: session, API tokens, username/password.
API Gaps	OIDC integration less polished than native implementations. Setup requires specific env vars.
SSO	⬚ **OIDC via django-allauth** (v2.5.0+). Also supports HTTP_REMOTE_USER header auth for reverse-proxy SSO.

Attribute	Detail
Keycloak	⬚ **Supported** — requires PAPERLESS_APPS + PAPER-LESS_SOCIALACCOUNT_PROVIDERS configuration.
Why include	**OCR-first workflow** — turns scanned PDFs into searchable archives. AI auto-tagging with machine learning. Nested tag hierarchies. Consumption templates (automated workflow rules). Purpose-built for document digitization.
AI can do	Upload documents, trigger OCR, search full-text, manage tags/correspondents, bulk operations, auto-classify.
AI cannot do	Complex OIDC setup is less seamless than BookStack/Outline.
Priority rationale	P2 — strong for document digitization. Not every SMB needs this but very valuable for paper-heavy businesses.

1.4 4. Priority Summary

1.4.1 P1 — High Priority (10 tools, first expansion wave)

These fill the biggest gaps, have the strongest APIs for AI automation, and support Keycloak SSO:

Domain	Tool	API Score	SSO/Keycloak	What It Unlocks
CRM	**EspoCRM**	90% (REST)	⬚ Native OIDC	**Primary CRM. Native Keycloak.** Email sending API. Enterprise-ready.
Accounting	**Bigcapital**	85% (REST)	⚠ Proxy needed	Only OSS double-entry accounting with full API. **Replaces both Invoice Ninja and Akaunting.**
Project Mgmt	**Plane**	95% (REST)	⬚ Native OIDC	Best PM API + Keycloak. SDKs in Node.js/Python

Domain	Tool	API Score	SSO/Keycloak	What It Unlocks
Knowledge Base	**BookStack**	95% (REST)	☐ OIDC + SAML	Highest KB API. Structured hierarchy. MIT license
Helpdesk	**Zammad**	95% (REST)	☐ OIDC + SAML	"API First" — 100% ticket lifecycle via API
Forms/Surveys	**Formbricks**	95% (REST)	☐ SAML	Conditional logic API. Privacy-first.
E-Commerce	**Medusa**	90% (REST)	⚠ Plugin needed	Best REST e-commerce API. Multi-warehouse
E-Commerce	**Saleor**	85% (GraphQL)	☐ Native OIDC	Enterprise SSO. Multi-jurisdiction tax/shipping
Low-Code	**ToolJet**	90% (REST+JS/Py)	☐ Native OIDC	Native AI agents. 75+ connectors. Multiplayer
Team Messaging	**Rocket.Chat**	90% (REST+DDP)	☐ OIDC + SAML	E2EE. Group/role sync. Most mature messaging

Adding P1 tools brings the catalog from **28 → 38 tools**.

SSO summary for P1: 8 of 10 have native Keycloak support. The remaining 2 (Bigcapital, Medusa) can use oauth2-proxy sidecar or plugin integration. **Note:** Stalwart Mail (current tool) also has native OIDC/Keycloak.

1.4.2 P2 — Medium Priority (10 tools, second expansion wave)

Domain	Tool	API Score	SSO/Keycloak
CRM	Corteza	70%	☐ OIDC + SAML
Project Mgmt	Leantime	70% (JSON-RPC)	☐ OIDC
Project Mgmt	Vikunja	75%	☐ OIDC
Project Mgmt	OpenProject	90% (HATEOAS)	☐ OIDC + SAML
Knowledge Base	Wiki.js	40% (GraphQL)	☐ OIDC
Helpdesk	FreeScout	80%	☐ SAML
Team Messaging	Mattermost	80%	☐ OIDC + SAML
Marketing	Dub	80%	☐ Self-hosted
Marketing	Mixpost	70%	☐
HR	OrangeHRM	85%	☐ OIDC

Adding P2 tools brings the catalog from **38 → 48 tools**.

1.4.3 P2 — Infrastructure/Media tier (4 tools)

Domain	Tool	API Score	SSO/Keycloak
Surveys	LimeSurvey	80% (JSON-RPC)	⚠ Plugin
Backup	Duplicati	60%	⬚ (MIT now)
Media	Immich	90%	⬚ OIDC
Documents	Paperless-ngx	80%	⬚ OIDC

Adding these brings the catalog from **48 → 52 tools**.

1.4.4 P3 — Lower Priority (3 tools)

Domain	Tool	Reason
Marketing	Shlink	Dub is superior; no SSO; no webhooks
Scheduling	Easy!Appointments	Cal.com already covers; no SSO
Communication	Element/Synapse	AGPL-3.0 (changed from Apache); federation complexity

Adding P3 tools: **52 → 55 tools**.

1.4.5 REMOVED from catalog — License Incompatible (16 tools)

Tool	Was	Reason
n8n	Current	**Sustainable Use License** — prohibits hosting as part of paid service
Poste.io	Current	**Proprietary** — "No Software may be used by, or pledged or delivered to, any third party." **Replaced by Stalwart Mail (AGPL-3.0).**
Windmill	Current	**AGPL + additional restriction** — "cannot sell, resell, serve as managed service"
Typebot	Current	**Fair Source License (FSL)** — prohibits competing products (changed from AGPL in 2024)

Tool	Was	Reason
Invoice Ninja	Current	**Elastic License 2.0** — prohibits providing as "hosted or managed service" (not AGPL as listed)
Twenty	Expansion P1	**Dual-licensed** — enterprise files required for production use, commercial license needed
Outline	Expansion P1	**BSL 1.1** — prohibits "Document Service" (commercial doc platform). Converts to Apache 2.0 in Jan 2030
Akaunting	Expansion P2	**BSL** — prohibits providing "to third parties as an Accounting Service" (not GPL as listed)
Budibase	Expansion P2	**Self-hosted terms** — explicitly prohibit "hosted or managed service" (updated Feb 2025)
Crater	Expansion	**Project abandoned** (Aug 2023). Security risk.
Focalboard	Expansion	**Maintenance uncertain.** No SSO. API 50%.
Peppermint	Expansion	**No API documentation.** No SSO.
Heyform	Expansion	**No API for AI agents.** No SSO.
LinkStack	Expansion	**No API at all** (0/10). No SSO. UI-only.
AppFlowy	Expansion	**No public API** (issue #1013). No SSO.
AFFiNE	Expansion	**No public REST/GraphQL API**. No SSO.

1.5 5. Resource Profiles

Each tool consumes different amounts of RAM, CPU, and disk. This affects which tier (Lite/Build/Scale/Enterprise) can run them.

1.5.1 Lightweight (<256 MB RAM)

Umami, Uptime Kuma, Shlink, Dub, GlitchTip, Listmonk, Static HTML, Diun, Vaultwarden, Vikunja, Easy!Appointments

1.5.2 Medium (256–512 MB RAM)

Gitea, Drone CI, NocoDB, Ghost, Cal.com, Chatwoot, Activepieces, Documenso, Redash, Stalwart Mail, Formbricks, BookStack, FreeScout, Mixpost, Paperless-ngx, EspoCRM

1.5.3 Heavy (512 MB–1 GB RAM)

WordPress, Nextcloud, MinIO, Penpot, Squidex, LibreChat, Odoo, Keycloak, Portainer, Wiki.js, Bigcapital, OpenProject, Plane, Zammad, Rocket.Chat, ToolJet, Leantime, Duplicati, Immich

1.5.4 Very Heavy (1 GB+ RAM)

Mattermost, Element/Synapse, Medusa, Saleor, OrangeHRM, LimeSurvey, Corteza

Tier mapping (approximate):

Tier	Server RAM	Recommended Max Tools	Notes
Lite	8 GB	8-10 lightweight + medium	Core + a few business tools
Build	16 GB	15-20 mixed	Most common business stack
Scale	32 GB	25-30 mixed	Full platform, multiple heavy tools
Enterprise	64 GB	35+ including very heavy	Everything, including Rocket.Chat + PM + full ERP

1.6 6. AI Agent Integration Assessment

Based on deep API research, here's the updated integration surface:

1.6.1 Tier 1: Full AI Automation (90%+ API coverage — agents do everything)

EspoCRM (REST, email API), Plane (REST, SDKs), BookStack (REST, 95%), Zammad (REST, "API First"), Formbricks (REST, conditional logic API), Medusa (REST, dual-endpoint), Rocket.Chat (REST+DDP), ToolJet (REST+JS/Py, native AI agents), Immich (REST, OpenAPI SDKs), NocoDB, Gitea, Cal.com, Chatwoot, Listmonk, Umami, Activepieces

1.6.2 Tier 2: Strong AI Automation (70-89% — agents do core tasks, minor UI gaps)

Stalwart Mail (REST Management API, 80%), Saleor (GraphQL, 85%), OrangeHRM (REST, 85%), Bigcapital (REST, 85%), OpenProject (REST/HATEOAS, 90%), FreeScout (REST, 80%), Dub (REST, 80%), Paperless-ngx (REST, 80%), LimeSurvey (JSON-RPC, 80%), Vikunja (REST, 75%), Mixpost (REST, 70%), Leantime (JSON-RPC, 70%), Corteza (REST, 70%)

1.6.3 Tier 3: Partial AI Automation (40-69% — significant UI interaction still needed)

Odoo (REST+XML-RPC), WordPress (REST), Nextcloud (WebDAV+OCS), Ghost (Content+Admin API), Keycloak (Admin REST), Penpot (limited), Redash (queries/dashboards), Duplicati (REST, 60%), Wiki.js (GraphQL, 40%), Shlink (REST, 60%)

1.6.4 Tier 4: Minimal/No API (agents cannot effectively operate)

Portainer, Uptime Kuma, GlitchTip, Vaultwarden, Static HTML, Diun, Mattermost (Bot API), Element/Synapse (Matrix API), Easy!Appointments (REST but no SSO)

1.7 7. SSO / Keycloak Compatibility Matrix

Tool	OIDC	SAML	Keycloak Tested	Group/Role Sync	Notes
Stalwart Mail	☐ Native (v0.11.5+)	☐	☐ Yes	—	OIDC open-sourced under AGPL. OAUTH-BEARER SASL.
EspoCRM	☐ Native	☐	☐ Yes	☐ Auto-team mapping	Best CRM SSO. Primary CRM.
Corteza	☐ Native	☐ Native	☐ Yes	—	Best overall SSO (OIDC+SAML)
Plane	☐ Native	☐	☐ Yes	—	Via God Mode

Tool	OIDC	SAML	Keycloak Tested	Group/Role Sync	Notes
BookStack	✓ Native	✓ Native	✓ Yes	—	Token refresh issue workaround
Zammad	✓ Native (v6.5+)	✓ Native	✓ Yes	✓ Role sync	Most enterprise-ready
Rocket.Chat	✓ Native	✓ Native	✓ Yes	✓ Group→room, role sync	Best messaging SSO
Saleor	✓ Native	✓	✓ Yes	—	Turnkey OIDC plugin
ToolJet	✓ Native	✓	✓ Yes	—	Auth Code + PKCE
OrangeHRM	✓ Native	⚠ Custom	✓ Yes	—	via Starter edition
Mattermost	✓ Native	✓ Native	✓ Yes	⚠ Mappers needed	Requires claim transforms
OpenProject	✓ Native (v15+)	✓ Enterprise	✓ Yes	✓ Group sync	Most robust PM SSO
Vikunja	✓ Native	✓	✓ Yes	✓ Team from claims	First-class Keycloak support
Leantime	✓ Native	✓	✓ Yes	—	+ LDAP support
Wiki.js	✓ Native	⚠ Undoc	✓ Yes	✗ No group sync	
Immich	✓ Native	✓	✓ Yes	—	Mobile SSO has issues
Paperless-ngx	✓ django-allauth	✓	✓ Yes	—	Requires env config
Formbricks	✗ Pending	✓ SAML	✓ via SAML	—	OIDC in roadmap
FreeScout	✓ Module		⚠ via SAML	—	Plugin-based

Tool	OIDC	SAML	Keycloak Tested	Group/Role Sync	Notes
LimeSurvey	⚠ Plugin	⚠ Plugin	⚠ via plugin	—	3rd-party OAuth2 plugin
Bigcapital	⬜	⬜	⬜	—	oauth2-proxy workaround
Medusa	⚠ Plugin	⬜	⚠ via plugin	—	Custom auth module
Dub	⬜ (self-hosted)	⬜	⬜	—	Cloud-only SAML
Mixpost	⬜	⬜	⬜	—	Laravel Sanctum only
Duplicati	⬜ (MIT now)	⬜	⬜ Likely	—	License changed to MIT March 2024

Summary: Stalwart Mail (current) has native OIDC/Keycloak. Of the 27 expansion tools, 16 have native or tested Keycloak support (including Mattermost), 4 more can use proxy/plugin workarounds, and 7 have no SSO story.

1.8 8. Category Dependencies and Recommendations

When a customer selects their tools during onboarding, the system recommends complementary tools:

If customer selects...	Also recommend...	Reason
Any CRM (EspoCRM, Odoo CRM)	Bigcapital	CRM without invoicing/accounting is half a workflow. Bigcapital covers both invoicing + accounting.
Any PM tool (Plane, Leantime, OpenProject)	BookStack or Wiki.js	Projects need documentation

If customer selects...	Also recommend...	Reason
Any CMS (Ghost, WordPress)	Umami	Content without analytics is flying blind
Chatwoot	Zammad	Real-time chat + structured tickets = full support stack
Listmonk	Formbricks	Email campaigns + surveys = full feedback loop
Gitea	Drone CI	Code hosting without CI is incomplete
Any team messaging (Rocket.Chat)	Cal.com	Team chat + scheduling = coordinated team
Any e-commerce (Medusa or Saleor)	Bigcapital, Dub	Selling needs accounting and link tracking
Any low-code (ToolJet)	Rocket.Chat, Plane	Internal tools need communication + PM
OrangeHRM	Rocket.Chat, Cal.com	HR needs scheduling + team communication

1.9 9. Licensing Notes

All remaining tools use OSI-approved open source licenses compatible with managed service deployment. v2.1 audit removed all tools with source-available, BSL, Elastic, Fair Source, Sustainable Use, or proprietary licenses.

AGPL compliance policy: We deploy unmodified upstream Docker images. AGPL requires source availability to network users only if the code is modified. Since we don't modify code and customers have SSH access to their servers, we are naturally compliant. If we ever patch an AGPL tool, we must make modified source available.

Notable license nuances:

Tool	License	Notes
Odoo	LGPL-3.0 (Community)	Community Edition only. Enterprise Edition is proprietary — do not deploy Enterprise modules.
Mattermost	MIT (Team) + Proprietary (Enterprise)	Team Edition only. Enterprise features not included. Verify no EE components in Docker image.
Saleor	BSD-3	Most permissive license in catalog. No restrictions.
ToolJet	AGPL-3.0	Community Edition unlimited users. Enterprise features separate. Deploy CE only.
EspoCRM	AGPL-3.0	Changed from GPL-3.0 in v8.1. Standard AGPL — no additional restrictions.
Rocket.Chat	MIT (Community) + Proprietary (EE)	Deploy Community Edition only. Verify no EE components.
Duplicati	MIT	Changed from LGPL-2.1 in March 2024. Fully permissive now.
Stalwart Mail	AGPL-3.0	Dual-licensed (AGPL + SELv1 Enterprise). Deploy community edition under AGPL. OIDC open-sourced in v0.11.5.
Immich	AGPL-3.0	Changed from MIT in 2024. Still compatible with our model.
Element/Synapse	AGPL-3.0	Changed from Apache-2.0 in 2023 (Synapse v1.99+). Compatible with our model.
Formbricks	AGPL-3.0	Core is AGPL. Enterprise features in `/ee` folder under separate license — deploy core only.
Documenso	AGPL-3.0	Open core — EE folder has separate license. Deploy community features only.

1.10 10. Open Questions

#	Question	Status	Notes
1	n8n license	Resolved	**Removed.** Sustainable Use License prohibits managed service deployment.
2	Outline BSL	Resolved	**Removed.** BSL prohibits Document Service. Converts to Apache 2.0 in Jan 2030.
3	Tool resource profiling	Open	Actual RAM/CPU measurements needed via load testing
4	AI agent integration prioritization	Open	Which tools get OpenClaw MCP integrations first? Recommended: EspoCRM, Plane, Zammad, BookStack, Rocket.Chat, Bigcapital
5	Tool update strategy	Open	How do we handle upstream tool updates?
6	Maximum tool count per tier	Open	Need benchmarks per Netcup server tier

#	Question	Status	Notes
7	Email server replacement	Resolved	**Stalwart Mail (AGPL-3.0) selected.** All-in-one: SMTP, IMAP, JMAP, POP3, CalDAV, CardDAV, WebDAV. Native OIDC/Keycloak (v0.11.5+). Management REST API. Built-in DKIM/SPF/DMARC/ARC. Written in Rust. Added to current tools.
8	Default CRM	Resolved	**EspoCRM is primary** (native Keycloak, email API). Twenty removed (commercial license required).
9	Medusa vs. Saleor as default e-commerce	Open	Medusa (REST, simpler) vs. Saleor (GraphQL, native SSO). Both kept — justified overlap.
10	ToolJet vs. Budibase	Resolved	**ToolJet is primary.** Budibase removed (managed service prohibition in self-hosted terms).
11	oauth2-proxy deployment pattern	Open	Need standard pattern for tools without native SSO (Bigcapital, Medusa).

#	Question	Status	Notes
12	Automation tool gap	**Important**	Only Activepieces (MIT) remains for workflow automation. Evaluate adding more: **Automatisch** (AGPL-3.0, Zapier alternative), or confirm Activepieces covers enough. n8n, Windmill, Typebot all removed.
13	Invoicing + accounting replacement	Resolved	**Bigcapital (AGPL-3.0, P1) covers both Invoice Ninja and Akaunting gaps.** Invoicing with customizable templates + full double-entry accounting + inventory. Also available: **InvoiceShelf** (AGPL-3.0, Docker) as a lighter invoicing-only alternative. Odoo invoicing module is interim until P1 deployment.
14	Conversational form builder replacement	Open	Typebot removed (FSL). Evaluate: **Chatwoot bot flows**, **Botpress** (MIT), or custom Activepieces flows.

#	Question	Status	Notes
15	Legal framing for OSS deployment	**Resolved**	**ToS v1.1 §2.3 and §7.2 updated with full infrastructure-provider language.** LetsBe framed as infrastructure management and AI orchestration provider, not software vendor. Customer is licensee, unmodified upstream Docker images, full SSH + credentials, enterprise licenses direct from vendors, tool list published on website. Foundation Document decision #39 aligned.

1.11 11. Changelog

Version	Date	Changes
1.0	2026-02-26	Initial catalog. 31 current tools. 36 expansion candidates across 14 domains.
1.1	2026-02-26	Catalog philosophy. Invoice Ninja to current (32). Baserow/IceHRM removed. Overlap notes.

Version	Date	Changes
2.0	2026-02-26	**Deep research evaluation of all expansion candidates.** Every tool evaluated for API completeness, SSO/Keycloak support, and strategic justification. 7 tools removed for API/maintenance issues. SSO compatibility matrix (§7) and AI Agent Integration Assessment (§6) added.
2.1	2026-02-26	**Comprehensive license audit.** Verified every tool's license for managed service compatibility. **9 additional tools removed** for license violations: n8n (Sustainable Use), Poste.io (Proprietary), Windmill (managed service prohibition), Typebot (Fair Source), Invoice Ninja (Elastic License 2.0), Twenty (commercial license for production), Outline (BSL Document Service restriction), Akaunting (BSL accounting service restriction), Budibase (managed service prohibition). **License corrections:** EspoCRM GPL→AGPL-3.0, Element/Synapse Apache→AGPL-3.0, OrangeHRM GPL-2.0→GPL-3.0, Duplicati LGPL→MIT. Selection criteria updated to explicitly exclude BSL/Sustainable Use/Elastic/FSL licenses. Current tools: 32→27. Expansion: 30→27 (P1: 10, P2: 10+4 infra, P3: 3). Full path: 27→37→51→55. Watchtower noted as archived (Dec 2025).

Version	Date	Changes
2.2	2026-02-26	**Replacements + final sweep.** Added **Stalwart Mail** (AGPL-3.0) as current tool replacing Poste.io — all-in-one mail server with native OIDC/Keycloak, Management REST API, Rust-based. Current tools: 27→28. Typebot noted as retained for internal/team use (not customer-facing). Invoice Ninja + Akaunting gaps resolved: **Bigcapital** (P1) covers both invoicing and double-entry accounting; **InvoiceShelf** (AGPL-3.0) noted as lighter alternative. Section headers updated to reflect current coverage post-removals. **Final comprehensive license sweep** of all 28 current + 27 expansion tools: all remaining licenses confirmed compatible with managed service model. Open Questions #7 (email server) and #13 (invoicing+accounting) resolved. **Count corrections:** P1 header 9→10 (Saleor was P1 since v2.0), P2 main 9→10 (Mattermost was missing from summary table). Full path: 28→38→52→55.

This document should be updated as tools are added, removed, or reclassified. Resource profiles should be validated with actual benchmarks before launch.