

# AI Factory Map

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**Last Updated:** 2026-05-27 (AI Factory / P2P reliability update)

**Purpose:** Single-page surface map of ALAI's AI system. Read in <10 minutes to understand the entire fleet.

**Audience:** John (AI Director), Alem (CEO), specialist agents

**AI Factory P2P gate reliability note (MC #102341):** Company Mesh Proveo auto-response can use a degraded evidence-only `PARTIAL`/`BLOCKED` fallback when strong verifier backends are unavailable, but only if the prompt embeds existing local evidence references plus validation/safety signals. Receipt/plumbing-only mesh responses do **not** satisfy the P2P pre-verifier gate. Final QA/MC/Proveo gates remain mandatory. Evidence: `/Users/makinja/system/evidence/102341/p2p-ready-gate-degraded-fallback-report-20260527.md`.

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## 1. Entry Points — Where to Start

### System dashboard:

```
bash ~/system/boot.sh
```

Shows: daemon health, MC task counts, service status, B2 backup state, review backlog. Read in <5 seconds.

### John's identity and routing rules:

- `~/.claude/CLAUDE.md` — Identity, routing table, 5 hard constraints (ALWAYS loaded)
- `~/system/rules/john-operating-system.md` — All operating rules in when/then format

### Universal search:

```
node ~/system/tools/discover.js "query"
```

Searches: tools (282), skills (78), agents (22), MCP servers (7), BookStack (201 docs), RAG (LightRAG), products (9)

## Task system:

```
node ~/system/tools/mc.js list|show|active|stats
```

Mission Control dashboard: <http://localhost:3030>

## System verification:

```
node ~/system/tools/discover.js --verify
```

Health check across manifest-index, skill-registry, specialist-mapping, MCP, BookStack, product-index, session-index, hivemind, LightRAG.

# 2. Routing Table — Companies & Specialists

13 active ALAI virtual companies. Synced with `~/system/agents/specialist-mapping.json`.

Company	Domain	Key Agents	Boundary Rules
<b>CodeCraft</b>	Architecture, backend, database	Petter Graff, Martin Kleppmann, Bruce Momjian, Hadi Hariri, Lee Robinson	—
<b>Vizu</b>	Frontend, design, UI/UX	Brad Frost, Lea Verou	<code>~/system/rules/codecraft-vizu-boundary.md</code>
<b>FlowForge</b>	DevOps, infra, daemons	Kelsey Hightower	—
<b>Proveo</b>	QA, testing, validation	Angie Jones, James Bach, Lisa Crispin, Dorota Huizinga	<code>~/system/rules/proveo-securion-boundary.md</code>
<b>Securion</b>	Security, audits, threat modeling	Parisa Tabriz, sentinel-architect	<code>~/system/rules/proveo-securion-boundary.md</code>
<b>AgentForge</b>	AI/ML, RAG, agent stack	Chip Huyen, Georgi Gerganov	—
<b>Finverge</b>	Fintech, payments, PSD2	Markos Zachariadis	—
<b>Skybound</b>	Mobile, SaaS, business analysis	Paul Hudson, sentinel-ba	—
<b>Helixsupport</b>	Incident response	—	—
<b>Lexicon</b>	Legal, contracts, docs	—	—
<b>Proxima</b>	Marketing, GTM	—	—

Company	Domain	Key Agents	Boundary Rules
<b>Skillforge</b>	Docs, training, runbooks, BookStack	—	—
<b>Resolver</b>	Cross-company systemic issues	—	—
<b>Datavera</b>	Research, data pipelines	—	—

### Orchestration routing:

See `~/system/rules/orchestration-surface.md` for decision tree: DAG vs chains vs factory vs one-shot vs cron.

## 3. Active Products — 2026-04-23

### Priority products (CEO 2026-04-17):

- **Drop** — PSD2 payment app (Norway/Scandinavia). Remittance + QR payments. MVP complete. Stack: Node.js, React Native, Next.js 15, PostgreSQL, BankID.
- **Bilko** — Accounting SaaS (Serbia/BiH/Croatia). With POS integration (MC #8209). Stack: Kotlin/Ktor, Next.js 15, PostgreSQL, Turborepo.
- **Tok** — Open Banking aggregator (Balkan markets). Stack: Kotlin/Ktor, PostgreSQL, BankID, PSD2.
- **Lobby** — AI-native HR/HMS/admin for Norwegian SMBs. Domain: alaione.no. Stack: Kotlin/Ktor, Next.js 15, PostgreSQL, BankID.

### Active but lower priority:

- **Intesa** — HR/EU pivot. PBZ Zagreb path (BiH dead 2026-04-21). MC #8608 active.
- **Quran19** — alai.no/ucenje. Broj 19 u Kur'anu + 19-TET sonification. Audio on ANVIL `~/Public/Research/quran-music/`.

### USA/Balkan healthcare (NOT priority per CEO 2026-04-17):

- **LumisCare** — Enterprise healthcare platform for US home health agencies. Stack: Java 21, Spring Boot 3.4, React 19, PostgreSQL, Azure.

### Other projects:

- Plock (WMS for Sweden), Gotiva (meal prep Balkan), BasicFakta (fact-check Norway), FontelePay (research), KenanHot (athlete site), RenDrom (PropTech client)

Full product catalog: `~/claude/projects/-Users-makinja/memory/MEMORY-products.md`

# 4. Tool Clusters — Quick Reference

## Build workflows:

- `/build`, `/build-plan`, `/prime-build`, `/plan-with-team` — cross-linked in each SKILL.md
- `/hop-build` — **GHOST SKILL** (referenced in CLAUDE.md + mc.js gate logic lines 648-698, but directory missing). Resolution pending (T4.1).

## Deploy verification (ZAKON PI2 mandatory):

- `/deploy-verify` — Playwright browser test after every deploy
- Full protocol: `~/system/rules/zakon-pi2-deploy-verification.md`

## Discover system:

- `node ~/system/tools/discover.js "query"` — 282 tools, 78 skills, 22 agents, 7 MCP servers, 201 BookStack docs, 9 products

## Mission Control:

- `mc.js` — add, start, ready, done, show, list, active, stats
- Dashboard: `http://localhost:3030`
- DB: `~/system/databases/mission-control.db` (26MB, 37 tables)

## Event bus:

- `~/system/tools/event-bus.js` + `event-handlers.js`
- 40 subscriptions, 2,117 events processed (audit 2026-04-23)
- 3 new handlers added in T3.1: `company.task_generated`, `agent.report`, `calendar.event_created`

## RAG system:

- **LightRAG:** `http://127.0.0.1:9621` (hybrid/local/global modes)
- Skill: `/lightrag-query`
- DB: `~/system/databases/knowledge.db` (187MB)
- Health: `curl http://127.0.0.1:9621/health`

## Cost tracking:

- `~/system/tools/cost-tracker.js summary today|week|month`
- DB: `~/system/databases/costs.db`
- Agent budget check: `agent-manager.js budget-check <id>`

## BookStack sync:

- URL: `https://docs.alai.no`
- Sync: `node ~/system/tools/bookstack-sync.js sync`
- Auto-sync daemon: `com.john.bookstack-sync` (every 5 min)
- 201 documents indexed

### Communication:

- Slack only: `node ~/system/tools/slack.js send|read <channel>`
- Workspace: `alai-talk.slack.com`

### Skills directory:

- 78 active skills in `~/claude/skills/`
- Indexed in `skill-registry.db`

### Credentials:

```
bw get item "X" --session $(cat /tmp/bw-session)
```

## 5. Ghost References — Audit Trail 2026-04-23

What got archived/retired during the AI Factory Audit (Phases P0-P5):

### Crashed daemons (Phase 0):

- `com.alai.health-monitor` — script `health-daemon.js` missing, crash loop unloaded (T0.1)
- `com.alai.model-warmup` — script `warmup-models.sh` missing, plist killed (T0.4)
- 3 daemons with exit 78 (wrong node path) patched: `com.alai.meta-agent-loop`, `com.john.learning-agent`, `com.john.tool-sync-audit` (T0.3)

### Dead agents and identities (Phase 2):

- **4 agent files archived** to `~/claude/agents/_archive/2026-04-23/`:
  - `general-purpose.md` (violates Hard Constraint #3 — no generic agents)
  - `minion.md` (violates Hard Constraint #3)
  - `sp-code-reviewer.md` (orphan, not in specialist-mapping.json)
  - `sentry-code-simplifier.md` (orphan)
- **35 identity files archived** to `~/system/agents/identities/_archive/` — no programmatic consumer found (T2.2)

## Dead databases (Phase 2):

- **3 stub DBs archived** to `~/system/databases/_archive/2026-04-23/`:
  - `mc.db` (12KB, 2 tables — real one is `mission-control.db`)
  - `master-control.db` (12KB, 2 tables)
  - `tasks.db` (12KB, 2 tables)

## Tool/plist cruft (Phase 2):

- **19 tool** `.bak` / `.pre-*` files archived to `~/system/tools/_archive/2026-04/` (T2.4)
- **8 plist** `.disabled` / `.bak` files archived to `~/Library/LaunchAgents/_archive/2026-04/` (T2.4)

## Task backlog triage (Phase 1):

- **29 stale paused tasks** force-closed via triage report (T1.3)
- Oldest tasks from 2026-04-08 (15 days stale) reviewed and resolved
- 211 of 247 review tasks had no route assigned — fixed via review-drain daemon (T1.2)

## Current daemon health (post-audit):

- **206 daemons** running with exit 0 (healthy)
- MC backlog reduced: paused tasks ↓, review tasks ↓ (targets: paused <500, review <50)

### Archive path (recoverable):

- `~/ .claude/agents/_archive/2026-04-23/`
- `~/system/agents/identities/_archive/`
- `~/system/tools/_archive/2026-04/`
- `~/Library/LaunchAgents/_archive/2026-04/`
- `~/system/databases/_archive/2026-04-23/`

### B2 backup crisis resolved (T0.2):

- Issue: `403 storage_cap_exceeded` since 2026-04-22
- Fix: CEO action in Backblaze console → storage cap increased
- Status: 03:30 backup window restored, Litestream SIGKILL loop stopped

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# 6. ZAKON Quick Reference — Three Pillars

# ZAKON NULA (TOOL-FIRST)

**Rule:** Never answer from LLM memory without tool verification.

**Enforcement:** Every response MUST be based on real tool output.

## Tool-first order:

1. Product/project/person → `node ~/system/tools/discover.js "query"` FIRST
2. Task status → `node ~/system/tools/mc.js show <id>` FIRST
3. File/code → `Read/Grep` FIRST — NEVER assume content
4. System state → `bash ~/system/boot.sh` or `discover.js --verify`
5. Service status → `docker ps`, `curl`, `git status` — VERIFY

**Violation = ERROR.** Alem will notice.

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# ZAKON PI2 (Deploy Verification Protocol)

**Rule:** Deploy tasks REQUIRE 6 hard checks.

**Full spec:** `~/system/rules/zakon-pi2-deploy-verification.md`

## Mandatory steps:

1. Repo must have `DEPLOY-MAP.md` in root
2. **Pre-flight:** `curl -sI <URL>` + `git log <branch> -5` + `gh run list` — BEFORE any code changes
3. **CI health check:** If last 5 runs = failure → FIX CI FIRST, do not push
4. **Post-deploy:** HTTP 200 + Playwright screenshot + new revision serving 100%
5. **Evidence:** `mc.js done` for H-priority deploy tasks BLOCKS without evidence files
6. **No bypass:** No exceptions

**Violation = task auto-blocked, re-work, Alem notified.**

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# ZAKON PLAN (Mandatory Documentation)

**Rule:** Every plan MUST include validation + documentation tasks.

**Enforcement:** Missing either = INCOMPLETE, do not present to Alem.

## Required tasks:

1. **Validation task** (Proveo/Angie Jones):
  - End-to-end test with real evidence
  - NOT dry-run only
  - L2+ machine-verified evidence (screenshot, log timestamp, curl output)

## 2. Documentation task (Skillforge):

- BookStack page for every system built or changed
- URL captured in MC evidence
- Indexed via `discover.js`

**Why:** Systems without tests break silently. Systems without docs die when the builder leaves.

# Quick Numbers — Post-Audit (2026-04-23)

Category	Count	DB/File
Tools	282	<code>~/system/tools/manifest-index.md</code>
Skills	78	<code>~/ .claude/skills/</code>
Agents	22	<code>~/system/agents/specialist-mapping.json</code>
MCP Servers	7	<code>.claude.json</code>
BookStack Docs	201	<code>bookstack-sync-map.json</code>
Products	9	<code>product-index.json</code>
Clients	7	<code>product-index.json</code>
Partners	6	<code>product-index.json</code>
Sessions (indexed)	11,355	<code>session-index.db</code>
HiveMind entries	28,886	<code>hivemind.db</code>
Daemons (healthy)	206	<code>launchctl list</code>
MC Tasks (total)	8,929	<code>mission-control.db</code>
MC Open	360	—
MC In Progress	3	—
MC Ready for Review	188	—
MC Paused	1,936	—
MC Blocked	439	—
MC Done	6,003	—

## Read Next

- **Full operating rules:** `~/system/rules/john-operating-system.md`
  - **Product catalog:** `~/ .claude/projects/-Users-makinja/memory/MEMORY-products.md`
  - **Infra details:** `~/ .claude/projects/-Users-makinja/memory/MEMORY-ops.md`
  - **Design standards:** `~/ .claude/projects/-Users-makinja/memory/design-standards.md`
  - **Audit plan:** `~/system/specs/ai-factory-audit-plan.md`
  - **Orchestration routing:** `~/system/rules/orchestration-surface.md`
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**Questions? Run:** `node ~/system/tools/discover.js "your query here"`

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Revision #4

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