

AI THAT WORKS — FROM DATA TO DECISIONS

Complete company document of A&L Prime s.r.o.
— operator of the CzechAI and EstateX brands.

\$1

 WHO WE ARE — IDENTITY AND LEGAL FRAMEWORK

WHAT IS IN THIS CATEGORY

Operator, registration number, registered address, positioning statement and notes on data consistency across sources. Contains **3 subsections**.

CzechAI builds and operates complete AI systems: proprietary GPU and LLM infrastructure, data pipelines, knowledge bases, agents and ready-made applications for real estate, law, finance, insurance, corporations and public administration. We do not deliver a presentation or a single chatbot — we deliver tools that, within a real process, search, verify, evaluate and prepare output, in Czech, with an audit trail, in a regulated environment.

Positioning statement (approved wording): "AI that works — from data to decision."

Company details

ITEM	VALUE
Operator	A&L Prime s.r.o. — operator of the brands CzechAI / EstateX
Company Registration Number	24009245

ITEM	VALUE
Registered address	Záměstní 1155/27, Slezská Ostrava, 710 00 Ostrava, Moravian-Silesian Region (Ostrava-City District)
Legal form	limited liability company (code 112)
Date of incorporation	28. 11. 2025
VAT payer	no
Registry entries	active in the public register (VR), RES and the trade licensing register (RŽP)
Business activities (CZ-NACE)	information and communication activities (J), management consulting (7112), rental and management of real estate (6820), other professional, scientific and technical activities (63990) and others
Brand	CzechAI, continuously since 2018 (8 years)
Management	Leoš Horčíčka — founder, lead developer and CEO
Deployment	SaaS · API · private cloud · on-premise
Focus	Czech language, regulated industries, data stays with the client / in the Czech Republic
Investor	no investor, funded from private resources
Contact	+420 732 941 900 · ceo@czechai.io · WhatsApp
Data source	ARES / public register (justice.cz), status as of 2026-07-22

One-sentence description: CzechAI builds and operates complete AI systems — its own GPU and LLM infrastructure, data pipelines, knowledge bases, agents, and ready-made applications for real estate, law, finance, insurance, enterprises, and public administration.

Position: The largest private AI infrastructure in the Czech Republic for the real-estate market and compliance. Built over the long term without an investor, from private resources. The CzechAI brand has been operating for 8 years (since 2018), continuously under the same brand, merely under different legal entities (different company registration numbers); A&L Prime s.r.o. is the current legal entity of the

brand. The incorporation date of this s.r.o. (28 November 2025) is not the start of operations — those have been running since 2018.

Notes on data consistency (across sources)

- **Legal entity:** A&L Prime s.r.o., Company ID 24009245.

How the founder's role is presented (four different formulations across sources)

SOURCE	TITLE / ROLE
Biography	"AI & full-stack solution architect" / "Founder & Lead Engineer — A&L Prime s.r.o. / CzechAI"; sought role: "Head of AI / Lead / Principal Engineer / (fractional) CTO"
IT_AI profile	"Chief Business Officer & AI Ecosystem Architect · A&L Prime s.r.o."
Assessment	"Solo founder of CzechAI / A&L Prime s.r.o."
Final-draft texts	"founder and lead developer of the CzechAI brand"; in the Contact section: "founder and CEO, CzechAI"

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FOUNDER — LEOŠ HORČIČKA

WHAT IS IN THIS CATEGORY

Leoš Horčíčka in his own words — competencies, technologies, certified expertise, experience. Contains **10 subsections**.

Founder, lead developer, and CEO of CzechAI. A top-tier practitioner who **single-handedly** built and runs in production a complete vertical AI ecosystem — from data through proprietary models and agents all the way to finished applications for banks, insurance companies, the state, and the real-estate market.

Who I am (in my own words)

My name is Leoš Horčíčka and I have been building Czech artificial intelligence for eight years. Since 2018, continuously, from my own resources, without an investor dictating the pace or compromises.

Before that, I spent years building computing infrastructure around the world — hardware, cooling, power systems, and the operation of farms at the very edge of what technology can handle. I learned that the difference between a polished presentation and a working system lies in the detail that holds under load. I carried that instinct into AI.

I designed and built the entire stack on which CzechAI stands, on my own: the models, the agent layer, the data pipelines, and the production operations. I do not rely on third-party cloud services or third-party models, because in regulated business the question "where is my data" is just as important as the question "what can this system do." I can answer both.

How many people can actually build this

A complete AI system in production is not the work of a single discipline — it combines **6+ specialisations simultaneously**: data engineering, machine learning, agent-system architecture, backend development, cybersecurity, and

domain expertise (**law · finance · real estate**). In companies, this typically requires **a team of 15-20 specialists**. Leoš handles it **alone, end-to-end**.

The number of people who have the entire vertical AI stack in real production operation is in single digits (3-5) in the Czech Republic; globally in the order of hundreds. Leoš is one of them — in the upper **0,5-1 %** practical AI builders.

Market position (independent assessment): - Building and operating a platform of this scale **solo** has been achieved in the Czech Republic by roughly a handful to a few dozen people — along the axis of "breadth and speed of solo delivery" this corresponds to **top ~0.1-0.5 %** of Czech builders. - The scope of work corresponds to the output of **a 12-20-member product-engineering team**.

Where he comes from and how he thinks

Originally a real estate and finance professional — which is why I build according to real business needs, not academic ones. Three principles: (1) no one will do it for you (consultants sell process, not results); (2) an own on-premise stack is a business choice that opens up clients whom the cloud excludes (banks, insurance companies, law firms); (3) speed is quality — MVP in weeks, not years.

«I don't build presentations. I ship production.» · «From idea to production system in weeks, not years.»

Key competencies

- **AI / LLM engineering** — RAG (Qdrant, Neo4j, Weaviate), multi-agent orchestration (LangGraph), self-hosted LLM stack on own GPU, model routing, fine-tuning workflow.
- **Data & ML** — proprietary ML ensemble for valuation ($R^2 = 0.948$), scoring, feature engineering, data pipelines over tens of millions of records.
- **Backend** — Python (Flask/FastAPI), Node.js, 100+ API endpoints, third-party integrations.
- **Infrastructure / DevOps** — 6 servers, ~210 PM2 processes, ~150 Docker containers, Nginx, PM2, Linux, SSL/CD, monitoring.
- **Databases** — PostgreSQL, SQLite, Qdrant, Weaviate, ClickHouse, Redis, Kafka, MongoDB.

- **Frontend** — responsive web, dashboards, ~80 production domains/UIs.
- **Domains** — real estate intelligence, AML / compliance, legal-tech, lead generation.

Key areas (from the IT_AI profile)

- **Applied AI & agentic systems** — orchestration of a fleet of AI agents (hundreds of specialised agents + dozens of MCP servers), conversational assistants with real actions (commercial models), RAG and LLM gateways with automatic failover (LiteLLM/Bifrost).
- **Proprietary LLM infrastructure** — operation of self-hosted models on GPU servers, uncensored/reasoning models, model routing (router), gateway with guardrails (PII, prompt-injection, audit).
- **Real estate tech & data** — scraping and monitoring of hundreds of portals and official notice boards, property price map with ML model, OSINT/AML background checks of entities from public sources, off-market platforms.
- **Product development** — dozens of web applications and landing pages, CRM, booking and lead systems, document generation (Typst/PDF), image and video generation, voice assistants.

Approach: «The product must work and never go down — atomic writes, backups, pre-deployment verification. Data from public / legitimate sources only, with emphasis on traceability and security.»

Technology — unified overview

- **Languages:** Python, JavaScript/TypeScript, SQL, Bash, PHP (PHP only in the IT_AI profile).
- **AI/ML:** LangGraph, RAG, scikit-learn / gradient boosting, custom ensemble models, self-hosted LLM (Ollama), Qdrant, Neo4j, Weaviate; LLM & agents (commercial and custom models, MCP, RAG).
- **Backend:** Flask, FastAPI, Node.js, REST API.
- **Infra:** Linux, Docker, PM2, Nginx, GPU compute / CUDA, CI/CD.
- **Data:** PostgreSQL, SQLite, ClickHouse, Redis, Kafka, MongoDB.

Why me / what sets me apart

- **Proprietary models, not third-party APIs.** Most "AI solutions" on the market are just a wrapper around a foreign cloud. I operate my own fine-tuned models on my own infrastructure — I guarantee where your data is and who has access to it: in the Czech Republic, with no one else.
- **Data sovereignty as the default state.** For a bank, insurance company, or government authority, this is a requirement — not a bonus. Data does not flow across borders or end up in the training of a foreign model.
- **A scale you will not find anywhere else.** 749 AI agents, 40+ swarms and 1,550+ live applications represent the largest private AI infrastructure for the real estate market and compliance in the Czech Republic. Everything is already running in live production today.
- **Speed of delivery.** Eight years of built-up foundations mean that I deploy a new domain in weeks, not quarters.

Certified expertise — CzechAI Academy

Proprietary certification authority — **CzechAI Academy** (academy.czechai.io · verification.verify.czechai.io). Leoš is both the author and holder **28-module** certification programme aligned with the EU AI Act, across 5 levels (L1–L5).

Programme breakdown: - **Governance & compliance:** AI Literacy (AI Act), AI Act, AI Governance, GDPR, ISO 27001, AI Risk, AI Security. - **Technology:** Prompt Engineering, Generative AI, RAG, agentic systems, LLM, data, automation. - **Applications:** finance, law, public administration, healthcare, education, marketing, accounting, HR. - **Management:** AI Management, AI Professional, AI Consulting, Research, strategy, transformation.

External qualifications: Elements of AI (University of Helsinki, Finland) · Google (AI/ML).

ALL 28 CERTIFICATIONS (EXACT LIST AND NUMBERS)

#	CERTIFICATE	NUMBER
1	AI Literacy (AI Act)	CZAI-AIL-2026-0001
2	AI for Management and Leadership	CZAI-AIM-2026-0002
3	AI Practitioner	CZAI-AIP-2026-0003

#	CERTIFICATE	NUMBER
4	Prompt Engineering	CZAI-PRE-2026-0004
5	AI Automation Specialist	CZAI-AUT-2026-0005
6	AI Content Creator	CZAI-CON-2026-0006
7	AI Data Analyst	CZAI-DAT-2026-0007
8	AI Governance & Compliance	CZAI-GOV-2026-0008
9	ISO/IEC 42001 AI Management System	CZAI-ISO-2026-0009
10	AI Act Compliance Officer	CZAI-ACT-2026-0010
11	AI Risk & Ethics	CZAI-RSK-2026-0011
12	GDPR & AI / Data Protection	CZAI-GDP-2026-0012
13	Generative AI Engineering	CZAI-GEN-2026-0013
14	RAG & Knowledge Systems	CZAI-RAG-2026-0014
15	AI Agents & Multi-agent	CZAI-AGT-2026-0015
16	LLM Ops & AI Deployment	CZAI-LLM-2026-0016
17	AI Security	CZAI-SEC-2026-0017
18	AI Real Estate Intelligence	CZAI-RES-2026-0018
19	AI in Finance and Insurance	CZAI-FIN-2026-0019
20	AI in Law	CZAI-LAW-2026-0020
21	AI in Public Administration	CZAI-PUB-2026-0021
22	AI in Education	CZAI-EDU-2026-0022
23	AI in Healthcare	CZAI-HLT-2026-0023
24	AI in Marketing and Sales	CZAI-MKT-2026-0024
25	AI in Accounting and Administration	CZAI-ACC-2026-0025
26	AI in HR and Recruitment	CZAI-HRM-2026-0026

#	CERTIFICATE	NUMBER
27	AI Strategy for Leaders	CZAI-STR-2026-0027
28	AI Transformation Manager	CZAI-TRM-2026-0028

Guarantees for regulated clients

-  Operating in compliance with the EU AI Pact (aligned with the AI Act, Regulation 2024/1689).
-  European security clearances for working with sensitive data · data secure & on-premise (never leaves the Czech Republic / the institution).

Work experience (formulation from CV)

Founder & Lead Engineer — A&L Prime s.r.o. / CzechAI 01/2024 – present · Czech Republic (remote). Built and operated by one person, without an investor, from private resources. - Designed and deployed the entire production platform: 6 servers (incl. GPU RTX PRO 6000, 96 GB VRAM), ~210 PM2 processes, ~150 Docker containers, ~80 public domains. - Built 41 multi-agent AI swarms, 749 AI agents, 46 MCP servers. - Built the data layer: 19 million registry records, 3.48 million companies (ARES), 702,502 property listings, 3.01 million address points (RUIAN). - Responsibility for the full lifecycle: architecture → development → deployment → operations → business.

§3



CZECHAI BY THE NUMBERS

WHAT IS IN THIS CATEGORY

Hard numbers: brand and web, AI arsenal, data for law, AML, real estate, OSINT and the public sector. Includes **9 subsections**.

Brand, scope and web

- **8 years** — continuous development and operation (2018–2026), approved for external use.
- **1 550+** — proprietary applications, modules and outputs; a conservative published figure.
- **6 521** — unique URLs on the public directory, across 110 folders (the actual count exceeds the published figure of 1,550+).
- **4 586** — HTML pages in public production, totalling 25 GB.
- **130** — live subdomains on czechai.io (HTTP 2xx), asset scan 2 Aug 2026.
- **153** — live hostnames across all domains (asset scan 2 Aug 2026).
- **138** — domains and subdomains in the production web server configuration.
- **16** — root domains held (per registrar export).
- **2 300+** — pages aggregated on the „Master Hub“.

AI arsenal (agents, skills, swarms)

- **749** — AI agents in the arsenal (local definition library, all executable).
- **73 agents in 40 swarms** — production registry.
- **26 swarm definitions + 7 aliases + 23 "bedrock-simple"**.
- **15** — shared tools for agents.
- **749 agents** — local definition library (all 749 executable).
- **1 009 skills** — total across the arsenal.
- **77** — custom commands (added to the server on 3. 8. 2026).
- **46 MCP servers** across the workstation and the main server.
- **708** — agents in the curated catalogue with Czech names on the public arsenal page.

The marketing layer additionally states: 40+ LangGraph swarms, 46 MCP servers.

Data — law

- **838 919** — court decisions in the database for Legal AI (status 29. 9. 2026).
- **17 679 regulations** a **30 712 sections** in the legal database.
- **617 362** — vectors in the case-law knowledge base.
- **277 644** — vectors in the e-Sbírka knowledge base; total **23 vector collections**.

Data — AML, registries, companies

- **1.5 M** — sanction records in the AML layer (measured).
- **3 255 092** — enriched company records from ARES (elsewhere cited as 3.48 M companies).
- **18** — modules in the AML layer.

Data — real estate

- **308 471** — records in the main live real-estate database (766 MB, 122 columns).
(other sources: 308,467; 349,908 in MASTER_LIVE; 300,000+ / ~197 k real-time).
- **1 454 651** — records in the archive database (1.38 GB).
- **17 403 / 44 213 / 138 670** — record increment over 24 h / 7 days / 30 days.
- **100 %** — share of records priced by model V24.
- **267 055 (86,6 %)** — records with GPS coordinates.
- **1 981** — identified opportunities.
- **7 472** — records with owner phone number (elsewhere 7,207 estate agencies in a separate broker database).
- **4 474** — auctions in the database.
- **70 → 62 live** — portals with health check (3 blocked, 4 dead).
- **R² 0,948** — accuracy of apartment valuation by model V24 in its own back-test (MAPE 7.13 %).

Search (retrieval) system

- **45 live sources out of 72** in the catalogue; the remaining 21 are awaiting an adapter (Bezrealitky, ÚZSVM, hlídač státu and five Apify actors).
- **77 code files** in the collection layer: 41 adapters, 14 services, 13 scripts; normalisation core 1,472 lines.
- **383** — portals discovered by automatic discovery (375 verified: 367 reachable, 6 unavailable, 2 blocked).
- **30 minutes** — collection-cycle period (eight steps, protected by a lock).
- **52 programs** in the processing pipeline: 36 in cron, 8 long-running processes, 8 scraper classes; plus 25 Docker containers.
- **2 full cycles per day** (00:00–08:00 a 12:00–19:00).
- **5 validator phases** of URL and content, batch of 5,000 records, 20 workers.
- Performance over 36 hours (72 cycles): downloaded **61 998** · new listings **2 708** · direct owners **+6 055** · enriched **18 300** (of which 2,454 dead URLs) · new records total **8 792** · **362** exports.
- Independent increment verification: export CSV 2 Aug = 41,514 rows, 3 Aug = 51,183 → +9,669 in 35 h.
- **30 leads** — how many of 51,168 listings pass the strict qualification filter.
- **5** — processes of the "hunter" family (Telegram broadcast of undervalued listings, 30-min cycle, calls the V24 price map and arbitrator).

OSINT

- **50** — total OSINT arsenal: **21 classic tools + 29 data sources** of the Crucix monitoring platform.
- **27 live, 2 faulty** — out of 29 Crucix data sources; sweep every 15 minutes.
- **5** — running OSINT services (API tools, vetting, swarm/orchestrator, Crucix, SpiderFoot); all online, 0 restarts.
- **21 agents, alive 20/21** — fan-out of the OSINT swarm orchestrator (the dead one is the meta-search engine).
- **233** — SpiderFoot modules (running for three months, 0 scans in the database).
- **175** — IntelOwl analysers (118 over observables + 57 over files), 7 connectors, 10 dockerised integrations.

Public administration

- **14** — AI solutions for public administration.

Summary figures (pitch version)

- 8 years in operation (since 2018), without an investor.
 - 1,550+ proprietary SaaS applications live — the largest private AI infrastructure in the Czech Republic for real estate + compliance.
 - AI Právník — 17,679 regulations, 838,000+ decisions.
 - The most accurate valuation in the Czech Republic — R^2 0.948, MAPE 7.13%, 3.5× more accurate than standard CMA.
 - AML — 18 modules, 1.5 million sanctions records, screening ~16 s.
 - The largest dataset in the Czech Republic — 19 million registry records, ARES 3.48 million, RÚIAN 3.01 million address points.
 - Speed — MVP in weeks, not years.
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§4 WHAT WE DO — PRODUCT AND INDUSTRY CATEGORIES

WHAT IS IN THIS CATEGORY

21 product and industry categories — from a proprietary LLM laboratory to healthcare. Contains **21 subsections**.

One ecosystem connecting models, data and concrete workflows. Categories 1–13 form the core offering, 14–20 are industry packages, 21 is the technical layer underlying categories 4 and 6.

1. Proprietary LLM and AI laboratory

- **Proprietary GPU and LLM infrastructure** — self-hosted models, model gateway, routing, load-balancing and failover across both proprietary and external models.
- **Adaptation and fine-tuning** — specialisation of models for Czech, domain-specific tasks, documents, tool-calling and client-specific processes.
- **RAG and knowledge systems** — Qdrant, hybrid search, knowledge graphs, internal documents and verifiable answer sources; proprietary Czech knowledge layer **cz-rag**.
- **Agents and orchestration** — specialised agents, MCP tools, multi-agent workflows, memory and automatic handoff of work between roles.

2. MADLA Stack — Arsenal

- **MADLA Orchestrator** — a single controlling brain recognises the assignment, selects specialists and assembles a team for the specific task.
- **Specialists for every domain** — agents for development, data, law, finance, real estate, marketing, research, design, security and operations.
- **Control of connected tools** — the arsenal works with tools, registries, documents, code, applications, databases and workflows according to granted permissions. It does not stop at a chat response: it executes the work, produces an output, triggers a workflow or hands the task to the next specialist.

- **Swarms, memory and RAG** — teams pass context to each other, share a knowledge layer and can be switched to a custom LLM at any time without changing the solution logic.
- **Public presentation of the arsenal** at arzenal.czechai.io : agents, swarms, MCP tools, skills, RAG and memory — counts by type only. A separate internal version (MCP names, commands, hooks, rules) is non-public. The split took place on 3 August 2026.
- **Workstation ↔ server parity** has been automated since 3 August 2026 by a daily job (compares agents, skills, commands, rules, configuration and MCP, and adds only the difference; nothing is deleted).

3. Data intelligence and data pipelines

- **Data collection and enrichment** — web sources, documents, registries and client systems: scraping, OCR, normalisation, deduplication, continuous updates.
- **Public and reference sources** — ARES, ČÚZK, RÚIAN, ISIR, auctions, official notice boards, case law and other verifiable sources.
- **Geodata and mapping applications** — geocoding, risk layers, maps, spatial analyses, 3D visualisation and location intelligence (parcels, municipalities, heatmaps).
- **ETL, API and reporting** — data transformation into databases, API, dashboards, XLSX/CSV export, alerting or downstream automation.
- **worldmonitor** (monitor2.czechai.io) — continuous global event monitoring.
- **Crucix** (intel.czechai.io) — geopolitical and economic monitoring across 29 data sources (ACLED, OFAC, OpenSanctions, GDELT, FRED, NOAA, OpenSky, ADS-B, Comtrade, CISA-KEV, Treasury, USAspending, WHO, ReliefWeb, patent databases, Reddit, Bluesky, Telegram and others), sweep every 15 minutes. This is not a background check on individuals — a different genre from the rest of the OSINT layer.

4. Real estate, valuation and investment

- **Price Map V24** (shadow.czechai.io) — valuation of flats, houses and land from an address or listing URL: price, range, comparables and confidence level. R^2 0.948 in proprietary backtesting.
- **Opportunities below market** — searching for undervalued listings, direct owners, off-market opportunities and investment signals.
- **Real-estate portal and Copilot** — listings, market data, yields, risks and property due diligence in one place; platform **EstateX** (estatex.club).

- **Auctions and acquisition** — auction monitoring, market comparison, supporting materials for acquisition; database of 4 474 auctions, collected from ten auction portals including Portál dražeb, OK dražeb, Exdražeb and the customs administration, plus ISIR and state property offerings.
- **Lead Hub** — turnkey investment lead subscription: direct owners, long-listed, repeatedly offered, motivated sellers, undervalued, auctions and insolvencies. Output to spreadsheet, API or CRM.
- **Territorial development prediction platform** — prediction of land conversion to building plots based on zoning plans, ÚAP, ZÚR and ÚSES.
- **Essty / EstateX mobile application** — a real-estate agent in your pocket: listings, valuations, clients, voice control.
- **HádejCenu and Hypotown** — interactive tools for working with prices and locations, also suitable for marketing purposes.
- **Residential property portfolio management** — a white-label application for homeowners' associations and property managers: resident chat, utility billing, and tradesperson dispatch.
- **Telegram broadcast of undervalued properties** — five processes of the "hunter" family, a 30-minute cycle, connected to the V24 price map and the price arbitrator.

5. Legal AI and document intelligence

- **Legal AI** — legal research across regulations, case law, and organisational knowledge; answers with traceable sources. Backed by 838 919 court decisions, 17 679 regulations / 30 712 sections, and two vector bases (case law 617 362 vectors, e-Sbírka 277 644 vectors).
- **Contracts and submissions** — contract review, risk points, redlines, templates, document generation and dispute chronology.
- **Litigation support** — working with evidence and argumentation, hearing transcription, diarisation, rapid analysis of the latest case developments.
- **Governance and compliance** — support for GDPR, EU AI Act, NIS2 and internal policies; verification of legal citations against a database.
- **Swarm layer: `pravni`** — RAG over legislation and case law, property screening, contracts, change monitoring, UBO identification, enforcement proceedings.

6. AML, OSINT, fraud and security

- **AML and sanctions screening** — screening of individuals, companies and properties: sanctions, PEP, insolvency, enforcement, UBO, registries and risk report; 18 modules, risk score and lifecycle states.
- **OSINT and due diligence** — traceable connections, public digital footprint, structured basis for further investigation. The public screening service runs on osint.czechai.io.
- **CzechAI Shield and fraud-guard** — support for detecting insurance fraud: case prioritisation, anomalies, network connections and fraud score.
- **Security guardrails** — sensitive data detection, protection against prompt injection, access management and audit materials.

What the OSINT layer is technically composed of: - **21 classic tools:** Maigret 0.5.0, Sherlock 0.16.0, Holehe (live test of 121 sites in 10.2 s), Socialscan 2.0.1, h8mail, GHunt, Censys 2.2.19, CrossLinked, Social-Analyzer, socidextractor, PhoneInfoga 2.11.0, subfinder, amass, nmap, whois, dig, exiftool, Blackbird, Photon, Shodan, recon-ng. - **29 Crucix data sources** (see category 3), of which 27 are live. - **Dual orchestration:** fan-out orchestrator over 21 agents (10 targeting tool APIs — username, email, phone, domain, subdomain, recon, network, linkedin, person, company; the rest targeting screening, Crucix, AML, fraud-guard, deep-research, RAG and meta-search), and independently a screening service with its own aggregation over tools, AML, SpiderFoot and ARES, with auto-detection of input type. - **SpiderFoot** — 233 modules. **IntelOwl** — 175 analysers, 7 connectors, 10 dockerised integrations (nuclei, phoneinfoga, bbot, cyberchef, thug, pcap).

7. Banks, finance and insurance

- **Collateral valuation** — market estimate and supporting materials for LTV, mortgage or credit decision (model V24).
- **Underwriting and claims handling** — case triage, documentation processing, OCR, valuation and supplementation with external context.
- **Loans and financing** — credit scoring, affordability and mortgage calculations, partner portals; proprietary mortgage platform **HypoStars** (hypostars.cz).
- **Financial prediction Kronos** (kronos.czechai.io) — ML models for financial and market predictions as a basis for analytics, not as investment recommendations.
- **Banker Copilot** — CRM assistant: product knowledge, LTV and DSCR calculations, preparation of supporting materials and correspondence.

- **Collateral Intelligence** — ongoing collateral monitoring, portfolio revaluation and early warnings.
- **Insurance Knowledge Base** — unified search across insurance terms and conditions, exclusions, and pricing tables.
- **Anti-fraud Engine and Claims Settlement** — case prioritisation, anomaly detection, claims settlement support including document reading.
- **Reinsurance and Catastrophe Modelling** — inputs for reinsurance and cumulative risk modelling.
- **CNB Reporting and Institution Database** — inputs for regulatory reporting and financial institution records.
- **Regulated Deployment** — architecture for on-premise or private cloud with emphasis on data, auditability, and integration.
- Swarm layer: **banking** (11 roles including stress test, UBO, and construction financing) and **pojisteni** (10 roles including risk map and portfolio management).

8. State — AI solutions for public administration

(count: 16 published, 14 documented)

- **Public Data Analytics** — a suite of AI solutions built on official, tax, property, and open data.
- **Official Notices and Opportunities** — collection and classification of notices, auctions, sales, and public tenders from municipalities and institutions.
- **Official Notice Board Monitoring** — continuous tracking of postings across municipalities, regions, and ministries.
- **Analytical Support Tools** — Police AI platform and other systems; the system does not replace decisions made by the responsible person.
- **AI Tax Detective** — cross-referencing data from the financial administration, land registry, and business registers to uncover tax evasion.
- **Cyber Defence AI and Transport Infrastructure** — attack detection and forensic analysis; load prediction and investment optimisation.
- **Gov Cloud** — multi-tenant AI infrastructure for institutions with an agent catalogue and integration with state registries.
- **AI Education for Institutions** — CzechAI Academy: AI literacy, governance, and working with AI in alignment with the organisation's role.

9. Marketing, Facebook and reach

- **Marketing Command Deck** — orchestration of specialists for strategy, content, acquisition, analytics, and automation; multiple independent perspectives on a single brief.
- **Largest Facebook Community in the Czech Republic (230,000+ members)** — owner of the largest Czech Facebook group in the sector, together with a connected network of 241 community channels, of which 92 are in the investment, real estate, and finance segments.
- **Rozesílka.eu** — proprietary platform for data, campaigns, and AI communication: 37 million contacts, segmentation, own mail server and campaign tool, response measurement.
- **Performance, Content, and Distribution Network** — copywriting, SEO/GEO, paid media, social media, e-mail/SMS lifecycle, CRO, reporting.
- **CRM, Leads, and Sales Workflow** — lead discovery, enrichment and qualification, CRM integration, follow-ups, reporting.
- Swarm layer: `leady` (13 roles) and `leadreaper-b2b` (the only swarm that writes its output directly into the CRM).

10. Voice, image, video and documents

- **Voice Assistants** — Czech voice, conversational agents, phone scenarios, transcription and speaker diarisation.
- **Avatars and Video** — talking digital assistants, product and training videos, automated video pipeline.
- **Visual and 3D Creation** — image generation, product visuals, 3D elements, interactive maps and presentations.
- **Documents and Reports** — OCR, PDF, contracts, reports, flipbooks, data outputs and automated preparation of client materials.
- **Digital Print Shop** (`tiskarna.digital`) — bridging digital output to physical: printing, merchandise and print products.

11. Applications, portals and integrations

- **CzechAI Chat, Agent MAX, Aurum and darkstar** — agentic chatbots with access to models, tools, research and specialised assistants (the website lists only CzechAI Chat and Agent MAX).

- **EstateX and vertical portals** — ready-made platforms for real estate, finance, education, marketing and client self-service; **Digital Marketplace** (trziste.digital).
- **Custom Integrations** — API, MCP servers, n8n, e-mail, CRM, databases, spreadsheets, documents and other client systems.
- **Turnkey Websites and SaaS** — from the first working version to a fully operated product: frontend, backend, payments, administration, monitoring.
- **Service Universe** — a directory of products and demos.

12. Infrastructure, operations and DevOps

- **Production Operations** — servers, GPU, Docker, PM2, databases, model services, monitoring and operational automation.
- **Private Cloud and On-Premise** — environment design tailored to data sensitivity, regulatory requirements and client integrations.
- **Reliability and Oversight** — availability monitoring, backups, logging, alerting and operational procedures.
- **Rapid Delivery** — MVP addressing a specific problem within weeks; expansion based on measured results.

13. Education, strategy and transformation

- **CzechAI Academy** (academy.czechai.io) — a proprietary certification and training programme for individuals, teams, companies and public institutions.
- **AI Strategy** — selection of priorities, use cases, value, risks, data readiness and AI governance model.
- **Team Adoption** — practical workshops, internal assistants, guides and workflow configuration so that people actually use AI.
- **AI Audit and Roadmap** — assessment of the existing solution, improvement proposals, measurable goals and a deployment plan.
- **AI Rentgen** — an independent audit of a third-party AI solution, its data and infrastructure.
- **Certifications L1-L5** — from AI literacy through practitioner and automation specialist to governance and vertical specialisation; corporate package including an internal AI policy.
- **Simulators and Training** — a business simulator with model customer types, a training assistant for financial advisors.

- **Educational AI for Schools** — a teacher's assistant (lesson plans, tests, assessments) and a teaching AI with voice and cited sources.

14. Sole traders and small businesses

- **Order Generator** — searching for inquiries and opportunities matching the field and region.
- **Price Spy** — comparison of competitor prices in the area.
- **Autonomous Invoicing Agent** — issuing invoices, monitoring due dates and sending reminders.
- **Pocket Lawyer** — contracts, complaints and basic legal situations for sole traders.
- **Voice Receptionist** — answering calls, booking appointments, taking messages.
- **Grant Radar** — monitoring published grants and subsidies.
- **Reputation Manager** — tracking reviews and ratings.
- Swarm layer: [zivnostnici](#) (10 roles — order generator, partner screening, pricing, invoicing and receivables, legal advice, marketing, virtual receptionist, grants, contracts, reputation).

15. Corporate sector

- **Company Screening Platform** — vetting business partners, suppliers and counterparties against registries and open data.
- **Supply Chain Risk Monitor** — monitoring risks in the supply chain, insolvencies and ownership changes among suppliers.
- **M&A Target Finder** — identifying acquisition targets based on financial and sector criteria.
- **ESG Compliance Platform** — support for reporting under CSRD and ESRS, collection and consolidation of ESG data.
- **Procurement Optimizer** — procurement optimisation, price benchmarking and supplier evaluation.
- **HR Screening a Background Check** — screening of candidates from public and registry sources.
- **Business Intelligence Hub a Knowledge Management** — a corporate data layer and internal knowledge system with AI-powered search.

- Swarm layer: **firmy** (12 roles — assistant, recruitment, accounting, support, marketing, software, BI, company scanner, lead qualifier, grants, competitive intelligence) and **automatizace** (11 roles — corporate 360° profile, intelligence, buyer identification, acquisition targets, sector analyses, financial analyst, change monitor, ČNB data, SaaS, HR).

16. E-commerce

- **Competitive Pricing Engine** — continuous price comparison across e-shops and dynamic pricing.
- **Churn Prediction and Customer Segmentation** — churn prediction, RFM segmentation, campaign targeting.
- **Product Recommendation AI** — personalised product recommendations.
- **Fraud Detection** — detection of fraudulent orders and abuse.
- **Inventory Optimizer and Demand Forecasting** — inventory management and demand forecasting.
- **Shipping Cost Optimizer** — shipping optimisation across carriers (Česká pošta, PPL, DPD, Zásilkovna).
- **Abandoned Cart Recovery, Review & Reputation Manager, Marketing Attribution** — order completion, review management and marketing attribution.

17. Logistics and transport

- **Route Optimization Engine** — route optimisation (TSP/VRP) over the RÚIAN address system.
- **Fleet Management and Carrier Performance** — fleet management and carrier performance evaluation.
- **Warehouse Picking Optimizer and Cross-Dock Optimizer** — picking and cross-docking optimisation.
- **Load Planning Optimizer** — load planning, 3D bin packing.
- **Delivery Time Predictor** — delivery time prediction.
- **Cold Chain Monitor** — cold chain monitoring.
- **Returns Management** — returns management.

18. Manufacturing

- **Production Planning Optimizer** — production planning and OEE tracking.
- **Quality Control AI** — defect detection using computer vision and statistical process control (SPC).
- **Predictive Maintenance** — predictive maintenance based on IoT sensor data.
- **Digital Twin Simulator** — digital twin of the production line for simulations.
- **Traceability System** — track & trace and recall action support.
- **Energy Consumption Optimizer and Yield Optimization** — energy consumption and yield optimisation.
- **Workforce Optimization and Continuous Improvement Tracker** — shift planning and improvement tracking (Kaizen, Lean).

19. Professional services

- **Project Profitability Analyzer** — profitability of contracts and projects.
- **Proposal Generator AI and Document Automation** — offer generation and document automation.
- **Resource Capacity Planner** — team capacity planning.
- **Invoice Automation** — invoice automation.
- **Knowledge Base AI** — corporate knowledge base with AI-powered search.
- **Client Satisfaction Tracker** — client satisfaction tracking (NPS).
- **Client Relationship Manager a Business Development CRM** — relationship management and business pipeline.

20. Healthcare

- **Patient Appointment Optimizer** — appointment scheduling optimisation and no-show prediction.
- **Medical Transcription AI** — medical documentation transcription with ICD-10 coding.
- **Clinical Decision Support** — decision support over specialist sources (RAG); does not replace a physician's decision.
- **Insurance Claim Automation** — health claims automation (ICD-10, CPT).
- **Patient Risk Stratification a Medication Adherence** — risk stratification and treatment adherence monitoring.

- **Staff Scheduling Optimizer** — staff scheduling.
- **Healthcare Supply Chain a Revenue Cycle Analytics** — supply chain management and operational economics.

21. Search system and data pipeline (technical layer underlying categories 4 and 6)

It is not a swarm or a chatbot. It is a **cron pipeline running on two servers**, operating continuously.

Collection layer (main production server): - Node/ESM, 77 code files: 41 adapters, 14 services, 13 scripts; normalisation core 1,472 lines. - 45 live sources out of 72 in the catalogue: Bazoš in four modes, Avizo, Hyperinzerce, Annonce, Sbazar, Sreality, Reality iDNES, ten auction portals, ISIR, state property listings, regional portals, private seller listings. - 21 sources awaiting an adapter: Bezrealitky, ÚZSVM, hlídač státu and five Apify actors. - **Hermes discovery** discovers new portals autonomously — 383 in the database, 375 verified. - Cycle every 30 minutes, protected by a lock, eight steps: collection → import from the main database → import of direct owners → detail enrichment → four exporters → publication to the web.

Processing layer (scraper server): - 52 functional programs: 36 in cron, 8 long-running processes, 8 scraper classes. 25 Docker containers including the mega-scraper, browserless, lightpanda and five VNC scrapers (crawl4ai, scrapling, katana, colly, beat). - Two full cycles per day. Chain: scrape mega portals → portal self-heal → manual portals → rescrape → Sreality → special categories → Bazoš → backup → deduplication → validation → archiving → enrichment → map enrichment → tagging → auctions → batch valuation → export → XLSX export → synchronisation → health report.

§5



FLAGSHIP PRODUCTS, SERVICES, PLATFORMS AND TOOLS

WHAT IS IN THIS CATEGORY

Flagship platforms: Právník AI, price map, HypoStars, domains, swarm data sources. Contains **14 subsections**.

Over **1,550 live applications** in total — a portfolio summary is available at stack.czechai.io. A complete named overview across all sources is provided below.

5.1 Core platforms

chat.czechai.io — main cockpit. Central chat interface for the entire stack, built on a proprietary LLM gateway. Dozens of models (free cloud, dedicated GPU, and premium) with automatic failover and pre-configured assistants. A unified entry point to the platform's key tools.

AGENT MAX — agentic chat with real-world tools. A chat that doesn't just answer, but **acts**: in a tool-loop it calls dozens of real tools (registries, European registers, internal tools, memory) and returns a substantiated result. Capable of **automatic deep research** with live sources and citations, and also offers uncensored models for open-ended research.

copilot.czechai.io — real-estate copilot. In a single chat, **16+ specialised tools** calling real services: property search, price estimation, real-estate trends, property verification, in-depth research, background checks on individuals and companies, mortgage calculator with creditworthiness assessment, company analysis, business strategy, self-employed advisor, AML screening, legal and insurance advisor, lead qualification, workflow. For agents, advisors, and sales professionals. **EstateX (estatex.club) — platform for real-estate agencies.** A real-estate AI platform for agencies and brokers. AI modules for working with properties and clients, membership packages (Starter / Growth / Pro / Team) and **fully functional online payment** (card and QR). Reality intelligence: 184 portals scraped, ~197 thousand properties in real time.

Price Map — property valuation. Automated valuation of apartments, houses, and land from an address or a listing URL. Returns price, price per m², range, reliability score, comparable properties, and an arbitrage verdict. Current generation **V25** (more accurate in regional markets), in production as of **V24**. For banks, real-estate agencies, and investors.

Property Portal. A portal built on a database of hundreds of thousands of listings from multiple sources. Filtering by type, price, location, and source (private owner / no-agency / agency / auctions), with a detail view for each property including a price comparison and **a verified direct link to the original listing**. A dedicated mode highlights **undervalued opportunities from private owners**. 300,000+ properties from 184 portals.

AML Platform — screening of subjects and objects. Subject screening (individual/company): sanctions lists, public registers, ultimate beneficial ownership (UBO) chain, financial data, and OSINT compiled into a 2–3-page report with a risk score. **Object screening** (property): land registry, price-map valuation, market context, visual listing verification. 18 modules, 1.5 million sanctions records, screening in 15–20 s. For compliance, banks, lawyers, and due diligence.

Marketing Command Deck (marketing.czechai.io). A fleet of marketing agents organised into six groups (orchestrator, strategy, content, acquisition, analytics, automation). Supports **parallel queries to multiple agents** and response comparison — several independent perspectives on a single brief. 21 agents `mrkt/`. For marketing teams and agencies.

Universe of Services. An interactive ecosystem catalogue spanning **four galaxies** (State, Lawyer, Companies, Institutions), with nearly two hundred services, live previews, full-text search, and two modes (sober institutional / marketing). By domain: `stack.czechai.io` / `portal.czechai.io`. Live link: `router.czechai.io/web/vesmir-sluzeb.html`.

5.2 Legal AI — legal expert over the complete body of case law

A consolidated legal assistant that unifies legal and construction-law knowledge into a single central brain. It answers legal queries, reviews contracts, generates documents, and provides real-time assistance directly during court proceedings. Every response is always grounded in actual legal sources. Running live at `program2.czechai.io`.

- **Knowledge base: 838 919 court decisions** (838 919 measured in the database; previous generation 344 605) searchable both semantically and by full text; **125 statutes / tens of thousands of sections** (17 679 regulations / 30 712 sections; older generation 69 acts) including the Civil Code and the Building Act; vector and graph knowledge layer plus a database of contract templates; 4 semantic RAG layers (Neo4j + Qdrant), IRAC method.
- **Streamed responses and auto-router:** token streaming, auto-router between fast mode and deep analysis; Consultation, Analysis, Generator, and Case Law modes with context memory.
- **Litigation mode "courtroom beast":** responds to what has just been said by the opposing party/judge/witness/expert, handles evidence and burden of proof, anticipates the opposing party's moves, proposes procedural steps (objections, motions), distinguishes the user's role; every reply grounded in both legislation and case law.
- **Transcription of court proceedings with diarisation:** live transcription from microphone to Czech with speaker identification, timestamped transcript, analysis of contradictions and comparison of testimonies, summary and export.
- **Citation verification against hallucinations:** the anti-hallucination module verifies every citation (§§, case references, ECLI) against a real database; fabricated case law is flagged as not found.
- **Compliance module:** GDPR (incl. data processing agreements under Art. 28), AI Act (EU Regulation 2024/1689), NIS2 (Directive 2022/2555).
- **Further capabilities:** professional contract review (red flags, redlines, market standard), document and submission drafting, legal translation, case chronology, analysis of uploaded documents (PDF/DOCX/TXT), integration with ARES and AML screening, optionally an assistant with a live speaking face (video avatar).
- **Pipeline:** 25-step pipeline, 5 agents (statutory interpretation, contract analysis, case law, risks, summary), JSON + report.

5.3 Price map & real estate — valuation model (V24 production, V25 next generation under testing)

- **Architecture:** HistGradientBoosting + Meta-learner + KNN baseline + LGB correction; ensemble HistGBM + LightGBM + XGBoost + RandomForest + KNN.
- **Training:** 296,291 transactions (2018–2026, cleaned from 349,908), 85+ attributes, 8 data sources (ČÚZK WSDP + Sreality + Bezrealitky + ČNB + IPR/MMR + 3 others).
- **Geo:** 5 levels (GPS4 → city district → municipality → district → national), RUIAN 212M points, 20,564 municipalities with medians.

- **Accuracy:** APARTMENT $R^2=0.9478$ MAPE 7.13% MAE 387k · HOUSE $R^2=0.9178$ MAPE 9.24% · Land $R^2=0.8823$ MAPE 14.5% · Commercial $R^2=0.8312$ MAPE 18.2% · Cottage $R^2=0.8901$ MAPE 11.3% · V15 fallback MAPE 3.6%.
- **Benchmark:** V24 7.13% vs Direct CMA 24.68% (3.5× more accurate); vs ČÚZK ~24.7%, commercial appraisals 15–25%.
- **D-tags:** D10/D15/D20/D30/FAIR/P20+.

5.4 Product modules (whitepaper — 8 modules)

1. **AML platform** — 18 modules, 1.5M records, 15–20 s, weighted risk, REST API, audit log (§21 Act 253/2008 Coll.); time saving 30–90 min → 20 s.
2. **Price map (V25 next generation / V24 production)** — $R^2=0.948$ apartments / 0.918 houses, MAPE 7.13%, 20,564 municipalities.
3. **Multi-agent platform** — LangGraph swarms (58 agents in swarms out of 749 total), 12 shared tools.
4. **Realtime data pipeline** — 320 portals, 37M records, 22-step orchestrator.
5. **ETTSY voice assistant** — Flutter mobile app (io.czechai.czechai_pa_app , Android APK, iOS roadmap), Czech voice clone GPT-SoVITS "Vlasta", 6 tabs (Chat/Assistant/Images/Maps/History/Settings), 8 topics of the day.
6. **Legal AI** — 25-step pipeline, 5 agents, JSON + report.
7. **OSINT background check** — 15 tools (Maigret 2500+, Sherlock 400+, Holehe 100+, PhoneInfoga, Social-Analyzer, SpiderFoot, theHarvester, Photon, h8mail, GHunt, Blackbird, CrossLinked, Shodan, Socialscan) + ARES; risk 0–100.
8. **RAG / Knowledge Base** — Qdrant, 749 AI agents indexed, 41 swarms, hybrid search, 46 MCP servers.

5.6 Flagship AI brains

- **Aurum Agent** — a Czech autonomous AI agent running on proprietary models and GPUs. It understands the Czech legal system and local data, has direct access to a database of 300 000+ properties, AML registers, the land registry, and Hlídač státu. A replacement for expensive foreign agentic solutions — data never leaves the Czech Republic.
- **MADLA setup — Arsenal** (arzenal.czechai.io) — complete agent setup (749 AI agents), 40+ swarms, 46 MCP servers, 1,009 skills. Swarms are assembled manually or selected by the 'brain' according to the task; RAG, learning and memory. The model used can be swapped for a custom LLM at any time.

- **darkstar** — one of the primary agentic chatboxes (alongside CzechAI Chat, Agent MAX, Aurum).
- **AI Rentgen** (rentgen.czechai.io) — independent audit of third-party AI: whether it does what was promised, and whether the company is paying for thin air. 6 areas, conclusion within 24 h.
- **Proprietary LLM Gateway** — fault-tolerant, with automatic failover across models.
- **MCP Servers** — 90+ proprietary integrations (registries, land registry, ARES, ČNB, CRM, RAG).
- **Deep Research Agent / Dexter** — autonomous multi-source research with citations.

5.7 Real Estate and Investments (Named Services)

- **Property acquisition** (vykup.czechai.io) — fast, fair property buyout across the Czech Republic, no-obligation offer and cash payment.
- **Undervalued properties — live** — live feed of properties 25 %+ below market value.
- **CzechAI Opportunities** — below-market properties + public procurement notices from official bulletin boards in one place.
- **Official bulletin boards** — connected to official bulletin boards of over 6 200 municipalities: auctions, sales and local government announcements.
- **Auctions (koupit-drazit)** — a dashboard of upcoming auctions, compared with market price.
- **HádejCenu** — a viral tool “guess the property price” with a leaderboard based on real listings (lead capture).
- **RealityScan** (realityscan.pro) — in-depth scan and analysis of listings and portals. *
- **Reality Engine** — scraping engine / core of the data pipeline feeding the real-estate database.
- **Opportunity Brain / Opportunity Engine** — opportunity search and scoring across sources.
- **Property Watchdog / Property Hunter** — change monitor and criteria-based hunter.
- **Valuation Council** — arbitration of multiple models (V24 + CMA) for final valuation.
- **Direct CMA** — independent comparative analysis as a control layer.
- **Znalecký panel + Super Ensemble** — panel of AI experts and an ensemble of valuation engines.
- **GIS mapy** — price map, discount map, 3D heatmap, apartment-building map 35k+.
- **Registry Contact Map** — data map of contacts across the real-estate market.

- **DUMREALIT** — a model B2B offering of the entire AI ecosystem for a real-estate agency (pilot without CRM replacement).

5.8 Finance, Mortgages and the State

- **HypoStars** (hypostars.cz) — mortgage AI agent: online mortgage, bank comparison (8 / 9 / 10 banks depending on source), scoring within 24 h; calculator; partner portal for brokers; lead pipeline with 5 destinations. See dedicated chapter 5.13.
- **AI Tax Detective** — a tool for the state operating over tax and public data; detection of anomalies and risks.
- **Police AI** — a supporting AI platform for investigators; the system never determines guilt, it only underpins the work.
- **Insurance — AI Platform** — modules for underwriting, claims settlement and valuation for insurance companies.
- **Kronos** (kronos.czechai.io) — financial and market predictions, ML analysis (background material, not investment advice).
- **LeadOps** — lead engine with proprietary pricing models (3 pricing engines).
- **TradingAgents** — a fleet of investment agents for financial analysis (9 agents).
- **Broker Consulting** — an offering for financial advisory networks.
- **AaL Prime** (alprime.czechai.io) — mortgages / loans / non-bank financing.

5.9 Compliance, OSINT and Security

- **AML (18 modules)** — screening of both subject and object, second-level screening, audit trail.
- **OSINT background check** (osint.czechai.io) — 15 tools, complete dossier, risk score 0-100. *
- **Crucix OSINT** (intel.czechai.io) — geopolitical monitoring, 29 sources.
- **CzechAI Shield** — insurance fraud detection (fraud score, network analysis) for insurance companies.
- **Deep Research / Dexter** — in-depth research, due diligence, and sourced investigations.
- **Guardrails brána** — PII detection, protection against prompt injection, anonymisation, audit.
- **AI Rentgen** — independent audit of third-party AI (see 5.6).

5.10 Multimodal and Media

- **Czech Voice Clone** — proprietary voice model, TTS and voice cloning.
- **Voice PC Controller** — Czech voice assistant controlling a computer.
- **Talking Avatar** — live-avatar assistant for presentations and client scenarios.
- **Video Pipeline** — custom video and clip generation.
- **Image Generation** — product photos, marketing visuals, illustrations.
- **OCR 90+ Languages** — text extraction from documents and scans.
- **Songs** — custom music and video clips.
- **Book Production + Digital Print Shop** — personalised books and print-on-demand.

5.11 Education, Marketing and Communications

- **CzechAI Academy** (academy.czechai.io , verification verify.czechai.io) — premium AI certification linked to the EU AI Act, 28 modules, 5 levels for individuals, companies and public authorities.
- **Rozesílka.eu** (rozesilka.eu) — bulk e-mail campaigns: database, templates, statistics (37 mil. contacts).
- **Marketing Command Deck** — marketing management with an agent fleet (see 5.1).
- **NEMA** — complete rebranding and campaign package.

5.12 Websites, Subdomains and Tools

- **WhiteStone Club** — private investment club website (web + membership registration with approval workflow).
- **banky.czechai.io** — B2B pitch for banks and insurance companies (on-premise AI); router.czechai.io/web/czechai-pojistovny-banky.html .
- **smlouvy.czechai.io** — generation and management of client contracts.
- **Shop „Opportunities” · trziste.digital** (Digital Marketplace) · **tiskarna.digital** (Digital Print Shop + AI Design Studio) — shop and print.
- **Cesium 3D Globe · worldmonitor** (monitor2.czechai.io) — geospatial and monitoring dashboards.
- **Essty / Ettsty** — mobile personal/real-estate assistant (Flutter app) with voice control.
- **HashForge** — mining simulator (APK + PC panel).
- **archify** — text → architectural/workflow diagram.

- **Master hub** — aggregate of everything built (2 300+ pages) with filtering and previews.
- **Notion stack presentation**, flyers and industry presentations (insurance companies & banks, public sector — 14 products, partner offers).

5.13 HypoStars — Detailed Structure (Standalone Brand and Business System)

A brand and business system for mortgages, built on a comic-book universe (Hypouš & co.), which collects mortgage leads via social media, games and lead magnets, routes them to brokers and partners, and runs its own real-estate data engine in parallel.

Five interconnected layers:

LAYER	WHAT IT IS	WHERE IT LIVES
Brand & content	Hypouš, Rychlohypina, Dluhomor, Hypotown, comics, reels, videos	social media + web
Web & products	585 live HTML pages, calculators, games, blog, portals	server 179
Lead system	forms → API → 5 destinations, partner portal	179 + 3 Flask backends
Data engine	308 467 properties, 220 portals, daily scraping, enrichment	—
Outreach	FB groups, Teable base, Listmonk (649 k addresses), CRM	117 + 179

What is done for HypoStars every day — automatically:

FREQUENCY	ACTION
Continuously	8 scrapers on 134 collecting listings from 220 portals
Every minute	Pipeline watchdog (restart on failure)
Every 30 min	Bazoš scraping, AI valuation of 200 properties, opportunity website regeneration

FREQUENCY	ACTION
Every hour	Contact lookup for 800 direct owners
Every 3 h	Price recalculation, undervalued property detection, signal feed
2x daily	Database synchronisation 134 → 179
1x per day	Verification of all listing activity, portal health checks, backups to archive
Continuously	Umami measures traffic, Meta Pixel logs conversions, leads flow into 5 destinations

Manual (human work): daily reels and posts (TikTok, IG, FB, YouTube), comic strip episodes, script planned one year ahead; management of own FB group and posting to 92 relevant groups; communication with prospects and qualification; contacting brokers from a database of 7 207 agencies; selection of opportunities from enriched data and offering them to specific individuals; page updates (136 deployed SW versions) and new landing pages; processing of partner registrations, contracts, commissions; non-bank cases (clients declined by a bank referred to a partner).

5.14 Named Platforms and Products — Overview with Domains

PRODUCT	DOMAIN / PURPOSE
CzechAI Chat, Agent MAX, Aurum, darkstar	primary agentic chatbots with access to tools and research
CzechAI Copilot (real estate)	16+ tools in one chat (valuation, AML, mortgages, law, insurance)
EstateX	estatex.club — real estate AI platform, membership packages
Price Map V24/V25	shadow.czechai.io
HypoStars	hypostars.cz — mortgage advisors, calculator, partner portal
Marketing Command Deck	marketing.czechai.io — 21 agents
Service Universe	stack.czechai.io / portal.czechai.io — product hub

PRODUCT	DOMAIN / PURPOSE
Legal AI	program2.czechai.io — 4 RAG layers, litigation mode
Aurum Agent	Czech autonomous agent on own infrastructure
Arsenal CzechAI	arzenal.czechai.io — public counts by type
AI Rentgen	rentgen.czechai.io — independent audit of third-party AI solutions
Rozesílka.eu	rozesilka.eu — 37 mil. contacts, bulk campaigns
CzechAI Academy	academy.czechai.io, verify.czechai.io
Digital Print Shop	tiskarna.digital — print-on-demand + AI Design Studio
Digital Marketplace	trziste.digital
Worldmonitor	monitor2.czechai.io — global monitoring
Crucix	intel.czechai.io — geopolitical monitoring, 29 sources
Kronos	kronos.czechai.io — financial predictions
HádejCenu, Hypotown	interactive/gamified pricing tools
Essty	mobile real estate agent with voice control
Police AI	supporting analytics platform — never assigns guilt
OSINT Background Check	osint.czechai.io
Lead Hub	investment leads

5.15 Data Sources of the Search Swarm (Complete Catalogue)

Swarm has the full source catalogue configured; the orchestrator selects from it based on language, region and query type.

- **General and alternative search engines:** Google · Bing · DuckDuckGo · Brave · Mojeek · Kagi · Stract · Yep · Swisscows · Gibiru · Marginalia (independent index).

- **Regional (global layer):** Yandex (RU/CIS) · Baidu (CN) · Naver (KR) · Sogou · Seznam (CZ) · AOL · Yahoo.
- **Meta-search engines and SERP APIs:** SearXNG (self-host) · Whoogle (self-host, privacy) · Tavily · Serper / SerpAPI.
- **Archive and history (verification):** Web Archive · Archive.ph · CachedPages · stored.website · CommonCrawl.
- **Reverse image (photo verification):** TinEye · Yandex Image · Google Image · Bing Visual · FotoForensics (edit detection) · Jimpl (EXIF).
- **Corporate and domain intelligence:** Whoisology · BuiltWith · SpyOnWeb · DomainIQ · who.is.
- **Investigative and AML sources:** OCCRP Aleph · ICIJ Offshore Leaks · IntelligenceX · ChainAbuse / BlockChair (crypto) · scamsearch.io / scamdb (fraud).
- **Lead generation and e-mail:** Hunter.io · Tomba (430M+ e-mails) · RocketReach · ContactOut · Snov · Emailrep (reputation) · Reacher (verification).
- **OSINT (persons / usernames):** Whatsmyname · Sherlock · Predicta Search · SynapsInt · Pipl · Spokeo.
- **Threat intelligence:** VirusTotal · AbuseIPDB · abuse.ch (URLhaus / ThreatFox / FeodoTracker) · PhishTank · OpenPhish · Maltiverse.

Recommended core search swarm: MindSearch (brain) + awesome-hacker-search-engines (sources) + Whoogle (privacy metasearch); indexing backbone OpenSearch (Apache 2.0), fast layer RediSearch. Fully self-hosted, in compliance with sovereign operation in the Czech Republic. (Elasticsearch is less suitable from a licensing perspective than OpenSearch; Azure demo used as a reference only; Chroma is redundant with the proprietary vector layer.)

§6 CATALOGUE OF INTERNAL AI AGENTS / ROLES

WHAT IS IN THIS CATEGORY

Catalogue of internal agents across 23 professional groups plus production swarms. Contains **24 subsections**.

Arsenal **749 native AI agents**, in a single managed collection with a catalogue and rapid team assembly by domain (`arsenal.czechai.io`). In addition to 749 AI agents, it also includes **224 production business agents** (named catalogue AG-0001 ... AG-0226, deployed across the domains of real estate, AML, finance, insurance...); the remainder consists of specialised, orchestration and auxiliary agents. The catalogue is divided into **23 categories (I-XXIII)** plus supplementary swarm groups.

Overview of the 23 categories (what they do):

- **Developers** — write, edit and refactor code across languages and frameworks.
- **DevOps** — automate deployments, CI/CD, containers and operations.
- **Databases** — design schemas, optimise queries and manage storage.
- **Data Science** — analyse data, build predictive models and visualisations.
- **Designers** — design visuals, UI/UX and design systems.
- **Copywriters** — create texts and content for websites, campaigns, and documents.
- **Marketers** — strategy, campaigns, SEO/GEO, acquisition, and performance measurement.
- **Sales** — qualify leads, prepare proposals, and manage the sales process.
- **Support** — handle customer enquiries and resolve requests.
- **Finance** — model budgets, analyse costs, revenues, and key metrics.
- **Legal** — handle legal queries, contracts, case law, and compliance.
- **Security / OSINT** — background checks, investigative research, and security analyses.
- **Research** — in-depth research with cited sources and synthesis.
- **Project / Product** — plan and manage product and project agendas.
- **Architects** — design software and system architecture.

- **QA** — test, verify quality, and identify defects before deployment.
- **Real Estate** — properties, valuations, listings, and real-estate data.
- **Video / Audio** — processing, editing, and generating AV content.
- **HR** — recruitment, onboarding, and personnel administration.
- **Web / CMS** — build and manage websites and content management systems.
- **Strategy** — business strategy, positioning, and decision-making analyses.
- **Documentation** — create and maintain technical and user documentation.
- **Other** — specialised and cross-domain tasks.

I. Developers and Programmers (107)

1.  **3D Scenario Developer** — A specialist in 3D visualisation who creates immersive scenes and interactive models. `3D & Scene Developer`
2.   **AEM Frontend Specialist** — Assists with AEM component development using HTL and Tailwind CSS. `aem-frontend-specialist`
3.   **Agent framework Python** — Works with Python `microsoft-agent-framework-python`
4.   **Angular Architect** — Architects enterprise Angular applications with complex state management. `angular-architect`
5.   **API Designer** — Designs new APIs, creates specifications and refactors architecture. `api-designer`
6.   **Autonomous Optimisation Architect** — Continuously tests APIs for performance and ensures security. `Autonomous Optimization Architect`
7.   **Security Architect** — Expert in security architecture `Security Architect`
8.   **AI Trust Architect** — Designs identity and trust-verification systems for autonomous AI agents. `Agentic Identity & Trust Architect`
9.   **AI Agent Audit** — Designs and validates forensic audit trails for AI agents. `ai-agent-audit-specialist`
0.   **Backend Architect** — Designs scalable backend systems, databases and APIs. `Backend Architect`
1.   **Backend Architect** — Specialist in backend system architecture and API design. `backend-architect`
2.   **Backend Developer** — Builds robust APIs, microservices and backend systems. `backend-developer`
3.   **Code Security Reviewer** — Reviews code from a security perspective (OWASP, Zero Trust). `se-security-reviewer`

4.  **Blender Add-on Engineer** — Develops Python add-ons and automations for Blender software. `Blender Add-on Engineer`
5.  **Blockchain Developer** — Builds smart contracts, DApps and blockchain protocols. `blockchain-developer`
6.  **Build Engineer** — Optimises build performance and scales build systems. `build-engineer`
7.  **C# Expert** — Assists with software development for .NET projects. `CSharpExpert`
8.  **C# Code Cleaner** — Cleans, modernises and resolves technical debt in C#/.NET code. `csharp-dotnet-janitor`
9.  **C# MCP Expert** — Expert in MCP server development in C# for model context. `csharp-mcp-expert`
0.  **C# Programmer Pro** — Writes idiomatic C# code using modern language features. `c-sharp-pro`
1.  **C# Developer** — Builds ASP.NET Core web APIs and cloud-native .NET solutions. `csharp-developer`
2.  **C++ Expert Engineer** — Provides expert C++ guidance with modern best practices. `expert-cpp-software-engineer`
3.  **C++ Professional** — Builds high-performance C++ systems with modern C++20/23 features. `cpp-pro`
4.  **CLI Developer** — Builds command-line tools and terminal applications. `cli-developer`
5.  **Clojure Programmer** — Expert in interactive Clojure programming with REPL methodology. `clojure-interactive-programming`
6.  **Cloud Security Architect** — Designs zero trust architectures and security for cloud platforms. `Cloud Security Architect`
7.  **CMS Developer** — Specialist in Drupal and WordPress, creating themes and plugins. `CMS Developer`
8.  **Developer Advocate** — Builds developer communities and creates compelling technical content. `Developer Advocate`
9.  **drupal expert** — develops applications in drupal `drupal-expert`
0.  **electron angular native expert** — performs code reviews `electron-angular-native`
1.  **electron expert** — develops desktop applications in electron `electron-pro`
2.  **Ruby Expert** — Assists with Ruby and MCP `ruby-mcp-expert`
3.  **Rust Expert** — Assists with Rust and GPT `rust-gpt-4.1-beast-mode`
4.  **Rust MCP Expert** — Assists with Rust and MCP `rust-mcp-expert`
5.  **Feishu Integrator** — Full-stack expert in integrations with the Feishu Open Platform. `Feishu Integration Developer`

6.  **Filament Optimizer** — Optimizes Filament PHP admin interfaces. `Filament Optimization Specialist`
7.  **Flutter Expert** — For building cross-platform mobile applications with Flutter 3+. `flutter-expert`
8.  **Flutter Reviewer** — Reviews code changes in pull requests. `flutter-go-reviewer`
9.  **Frontend Developer** — Expert in modern web technologies and UI implementation. `Frontend Developer`
0.  **Frontend Developer** — For building complete frontend applications across frameworks. `frontend-developer`
1.  **Full-stack Developer** — Advanced autonomous agent for full-stack development. `voidbeast-gpt41enhanced`
2.  **Fullstack Developer** — For building complete features across layers. `fullstack-developer`
3.  **Geoprocessing Specialist** — Expert in ArcPy and Python, automates spatial workflows. `Geoprocessing Specialist`
4.  **Go build solver** — Resolves compilation errors and linter warnings in Go. `go-build-resolver`
5.  **Godot Scripter** — Specialist in GDScript 2.0, C# integration and Godot architecture. `Godot Gameplay Scripter`
6.  **Godot Shader Developer** — Specialist in visual effects in Godot 4, masters shaders. `Godot Shader Developer`
7.  **Golang Professional** — For building high-performance Go applications and microservices. `golang-pro`
8.  **Game Developer** — For implementing game systems and graphics optimisation. `game-developer`
9.  **Terminal Integrator** — Optimises terminal emulation and SwiftTerm integration. `Terminal Integration Specialist`
0.  **Smart Contract Engineer** — Expert in smart contracts `Solidity Smart Contract Engineer`
1.  **macOS Engineer** — Develops 3D rendering `macOS Spatial/Metal Engineer`
2.  **Tooling Engineer** — tool development `tooling-engineer`
3.  **Rust Engineer** — Assists with Rust and security `rust-engineer`
4.  **iOS Developer** — Specialist in native iOS development with Swift and SwiftUI. `ios-developer`
5.  **Java Architect** — Designs enterprise Java architectures and migrates Spring Boot applications. `java-architect`

6.  **Java MCP Expert** — Assists with building Model Context Protocol servers in Java.
`java-mcp-expert`
7.  **JavaScript Professional** — Creates, optimises and refactors modern JavaScript code. `javascript-pro`
8.  **Kotlin MCP Expert** — Assists with building Model Context Protocol servers in Kotlin. `kotlin-mcp-expert`
9.  **Kotlin Specialist** — Builds Kotlin applications with advanced coroutines and multiplatform code. `kotlin-specialist`
10.  **Laravel Expert** — Assists with developing modern Laravel 12+ applications.
`laravel-expert-agent`
1.  **Laravel Specialist** — Builds Laravel 10+ applications, Eloquent model architecture and queues. `laravel-specialist`
2.  **Mobile Developer** — Builds cross-platform applications with performance optimisation. `mobile-developer`
3.  **Neo4j Client Generator** — Generates Python clients for Neo4j from GitHub issues. `neo4j-docker-client-generator`
4.  **Next.js expert** — Specialist in Next.js 16, App Router and Server Components.
`expert-nextjs-developer`
5.  **Next.js Developer** — Builds production Next.js 14+ applications with App Router. `nextjs-developer`
6.  **Onboarding engineer** — Helps new developers quickly understand unfamiliar codebases. `Codebase Onboarding Engineer`
7.  **workflow optimizer** — optimises developer workflow `dx-optimizer`
8.  **PHP MCP expert** — Assists with PHP MCP server development using the official SDK. `php-mcp-expert`
9.  **PHP professional** — Works with PHP 8.3+ projects, strict typing and modern features. `php-pro`
10.  **Platform engineer** — Builds internal developer platforms and optimises infrastructure. `platform-engineer`
1.  **Rust professional** — Assists with Rust and ownership `rust-pro`
2.  **TypeScript professional** — advanced programming `typescript-pro`
3.  **python-mcp-expert** — Expert assistant for developing Model Context Protocol (MCP) `python-mcp-expert`
4.  **python-pro** — Writes type-safe production Python for APIs and complex applications. `python-pro`
5.  **python-reviewer** — Reviews Python code — PEP 8, type annotations, security and performance. `python-reviewer`

6. 🖥️🔧 **rails-expert** — Builds and modernises Rails applications including Hotwire and real-time features. `rails-expert`
7. 🖥️✨ **React frontend expert** — Specialist in React 19.2, modern hooks and Server Components. `expert-react-frontend-engineer`
8. 🖥️🔧 **react-performance-optimization** — React performance optimization specialist. `react-performance-optimization`
9. 🖥️🔧 **react-performance-optimizer** — Tunes React performance — bundle, rendering and Core Web Vitals. `react-performance-optimizer`
10. 🖥️🔧 **react-specialist** — Optimises existing React applications and resolves complex state management. `react-specialist`
11. 🖥️🐍 **Semantic Kernel Python** — Works with code using the Python version of Semantic Kernel. `semantic-kernel-python`
12. 🖥️🖥️ **Senior developer** — Premium implementation specialist `Senior Developer`
13. 🖥️👤 **Persona Passage Specialist** — Simulates user journeys through a website from the perspective of a defined persona. `Persona Walkthrough Specialist`
14. 🖥️☕ **Spring Boot Engineer** — Builds enterprise Spring Boot applications with microservices. `spring-boot-engineer`
15. 🖥️🗺️ **Strategic Planner** — Assists with analysis and strategic planning prior to implementation. `plan`
16. 🖥️🍏 **Swift Expert** — Builds native iOS, macOS and server-side Swift applications. `swift-expert`
17. 🖥️🚀 **Swift MCP Expert** — Assists with building Model Context Protocol servers in Swift. `swift-mcp-expert`
18. 🖥️📝 **Technical Editor** — Writes technical documentation, blog posts and educational materials. `se-technical-writer`
19. 🖥️📝 **Technical Writer** — Writes developer documentation, API references and tutorials. `Technical Writer`
20. 🖥️🎨 **UI/UX Designer** — Designs and develops outstanding user interfaces. `designer`
21. 🖥️🎨 **UI/UX Designer** — Designs and develops outstanding user interfaces. `designer`
22. 🖥️🏗️ **UX Architect** — Provides developers with solid foundations, CSS systems and clear implementation guidance. `UX Architect`
23. 🖥️👓 **visionOS Engineer** — Designs spatial interfaces for visionOS using SwiftUI. `visionOS Spatial Engineer`
24. 🖥️❤️ **Vue.js Expert** — Assists with Vue 3, Composition API and Nuxt 3. `vue-expert`
25. 🖥️🌐 **Django Developer** — Develops web applications in Django. `django-developer`
26. 🖥️🎮 **Unity Game Developer** — Game development. `unity-game-developer`
27. 🖥️👤 **MCP Developer** — Develops MCP servers. `mcp-developer`

8.  **MCP Protocol Developer** — Creates and tests MCP servers to extend the capabilities of AI agents. `MCP Builder`
9.  **Mobile Application Developer** — Creates mobile applications for iOS, Android and cross-platform solutions. `Mobile App Builder`
10.  **Mobile Application Developer** — Develops iOS and Android applications, native or cross-platform. `mobile-app-developer`
1.  **Unity Tools Developer** — Automates the Unity editor using custom tools and extensions. `Unity Editor Tool Developer`
2.  **Unreal Engine Developer** — Game development. `unreal-engine-developer`
3.  **Web GIS Developer** — Creates interactive mapping applications using MapLibre, ArcGIS and Leaflet. `Web GIS Developer`
4.  **Web3 Integrator** — Integrates Web3 applications and wallets with blockchain. `web3-integration-specialist`
5.  **WeChat Mini Programmer** — Develops WeChat Mini Programs with WXML/WXSS and integrates APIs. `WeChat Mini Program Developer`
6.  **XR Immersive Developer** — Develops browser-based AR/VR/XR applications and immersive technologies. `XR Immersive Developer`
7.  **Build Error Resolver** — Specialist in resolving build and TypeScript errors. `build-error-resolver`

II. DevOps and Infrastructure (55)

1.  **AEO Foundation Architect** — Designs infrastructure for AI engine optimisation and manages content. `AEO Foundations Architect`
2.  **AI/ML Engineer** — Develops, deploys and integrates machine learning models into systems. `AI Engineer`
3.  **LLM Architect** — Designs LLM systems. `llm-architect`
4.  **Salesforce Architect** — Specialist in Salesforce architecture. `Salesforce Architect`
5.  **Arm Migration Assistant** — Accelerates migration of x86 workloads to Arm cloud infrastructure. `arm-migration`
6.  **Azure AVM Terraform** — Creates, updates and reviews Azure IaC in Terraform using AVM. `azure-verified-modules-terraform`
7.  **Azure Infra Engineer** — Designs, deploys and manages Azure infrastructure, networking and Entra ID. `azure-infra-engineer`
8.  **Azure Terraform Implementation** — Creates and reviews Terraform code for Azure resources. `terraform-azure-implement`

9. 🏗️🌐 **Azure Terraform Planning** — Plans the implementation of Azure Terraform infrastructure as code. `terraform-azure-planning`
0. 🏗️💣 **Security Engineer** — Focuses on vulnerability detection and secure coding. `security-auditor`
1. 🏗️⚙️🔒 **Security Engineer** — Implements comprehensive security solutions and automates controls. `security-engineer`
2. 🏗️🔧 **Bicep Implementor** — Specialist in coding Azure Bicep IaC templates. `bicep-implement`
3. 🏗️🌐 **Bicep Planner** — Plans the implementation of Azure Bicep Infrastructure as Code. `bicep-plan`
4. 🏗️☁️ **Cloud Architect** — Designs, evaluates and optimises cloud infrastructure. `cloud-architect`
5. 🏗️⚙️ **Database Admin** — Optimises database performance, implements high availability and recovery. `database-administrator`
6. 🏗️⚙️ **Data Engineer** — Builds reliable data pipelines and scalable infrastructure. `Data Engineer`
7. 🏗️🏗️ **Data Engineer** — Designs, builds and optimises data pipelines and infrastructure. `data-engineer`
8. 🏗️🤖 **DevOps Automator** — Automates infrastructure, CI/CD pipelines and cloud operations. `DevOps Automator`
9. 🏗️🔄 **DevOps Expert** — A DevOps specialist following the principle of the infinite loop. `devops-expert`
0. 🏗️∞ **DevOps Engineer** — Builds and optimises infrastructure automation and CI/CD. `devops-engineer`
1. 🏗️🚀 **Docker Expert** — Optimises Docker images. `docker-expert`
2. 🏗️🎵 **Terragrunt Expert** — Infrastructure orchestration. `terragrunt-expert`
3. 🏗️🍰 **Azure IaC Export** — Exports existing Azure resources into IaC templates. `azure-iac-exporter`
4. 🏗️🔧 **Azure IaC Generator** — Generates IaC templates (Bicep, ARM, Terraform, Pulumi) with validation. `azure-iac-generator`
5. 🏗️⚙️ **GitOps CI/CD Expert** — A DevOps specialist for CI/CD, deployment tuning and GitOps. `se-gitops-ci-specialist`
6. 🏗️🚀 **Deployment Engineer** — Designs, builds and optimises CI/CD pipelines and deployments. `deployment-engineer`
7. 🏗️🛡️ **Site Reliability Engineer** — Expert in reliability and security. `SRE (Site Reliability Engineer)`
8. 🏗️🌐 **Terraform Engineer** — Infrastructure creation. `terraform-engineer`

9.  **IT Operations Orchestrator** — Orchestrates complex IT operations across domains. `it-ops-orchestrator`
0.  **Kubernetes Specialist** — Designs, deploys and troubleshoots Kubernetes clusters. `kubernetes-specialist`
1.  **Kubernetes SRE Specialist** — A Kubernetes SRE specialist prioritising reliability and security. `platform-sre-kubernetes`
2.  **ML Engineer** — Builds production ML systems and training pipelines. `ml-engineer`
3.  **MLOps Engineer** — Designs and implements ML infrastructure and CI/CD for models. `mlops-engineer`
4.  **Performance Monitor** — Tracks system metrics, detects anomalies and optimises resources. `performance-monitor`
5.  **Monitoring Specialist** — Specialist in metrics collection, alerting and log aggregation. `monitoring-specialist`
6.  **Troubleshooting Expert** — Resolves issues in production. `devops-troubleshooter`
7.  **Incident Manager** — Responsible for incident resolution. `rootly-incident-responder`
8.  **Deployment Orchestrator** — Deploys MCP servers. `mcp-deployment-orchestrator`
9.  **powershell-5.1-expert** — Automates Windows infrastructure in PowerShell 5.1 (AD, DNS, DHCP, GPO). `powershell-5.1-expert`
0.  **powershell-7-expert** — Writes cross-platform cloud automation in PowerShell 7 and CI/CD pipelines. `powershell-7-expert`
1.  **Terraform Reviewer** — security review `terraform-iac-reviewer`
2.  **Red team specialist** — Tests LLM deployments `llm-redteam-specialist`
3.  **Roblox Systems Scripter** — Specialist in Luau and security `Roblox Systems Scripter`
4.  **Cloud Migration Specialist** — Assists with moving systems from on-premise to the cloud. `cloud-migration-specialist`
5.  **Terraform Specialist** — infrastructure management `terraform-specialist`
6.  **Vercel Specialist** — deployment to Vercel `vercel-deployment-specialist`
7.  **Database Administrator** — Specialist in database management, backups, replication and monitoring. `database-admin`
8.  **Infrastructure Manager** — Expert in system reliability, performance optimisation and operations. `Infrastructure Maintainer`
9.  **SRE Engineer** — Improves system reliability and manages error budgets. `sre-engineer`

10. 🛠️🌐 **Network Engineer** — Designs, optimises and troubleshoots network infrastructures. `network-engineer`
1. 🛠️🌐 **Terraform Specialist** — Manages infrastructure using Terraform and HCP. `terraform`
2. 🛠️📉 **Performance Engineer** — Identifies and eliminates performance bottlenecks in applications and databases. `performance-engineer`
3. 🛠️🌐 **Web Dispatcher** — Manages web infrastructure, servers and agents. `web-team`
4. 🛠️💻 **Windows Administrator** — Manages Windows Server, Active Directory, DNS, DHCP. `windows-infra-admin`
5. 🛠️💣 **Incident Resolver** — resolves production issues `devops-incident-responder`

III. 🗄️ Databases and Data Engineering (20)

1. 🗄️🩹 **AI Data Engineer** — Fixes data pipelines, detects and resolves issues automatically. `AI Data Remediation Engineer`
2. 🗄️🏛️ **Database Architect** — Specialist in database architecture and design, data modelling. `database-architect`
3. 🗄️🚀 **Database Optimiser** — Analyses slow queries and optimises database performance. `database-optimizer`
4. 🗄️🧐 **Database Reviewer** — PostgreSQL specialist in query optimisation, schema design and security. `database-reviewer`
5. 🗄️🌍 **Spatial Data Engineer** — Transforms unstructured geospatial data into clean datasets. `Spatial Data Engineer`
6. 🗄️🌱 **MongoDB Optimiser** — Analyses MongoDB performance, optimises queries and indexes. `mongodb-performance-advisor`
7. 🗄️💾 **MS SQL DBA** — Works with Microsoft SQL Server databases. `ms-sql-dba`
8. 🗄️🏛️ **Neon Database Architect** — Designs database schemas and optimises queries in Neon. `neon-database-architect`
9. 🗄️🔑 **Neon Auth Specialist** — Specialist in Neon Auth implementation and user management. `neon-auth-specialist`
10. 🗄️💡 **Neon Expert** — Consultant for Neon Serverless Postgres, general queries. `neon-expert`
1. 🗄️📉 **Neon Query Optimiser** — Identifies and fixes slow Postgres queries automatically. `neon-optimization-analyzer`
2. 🗄️🗄️ **NoSQL Specialist** — Expert in NoSQL databases such as MongoDB, Redis and Cassandra. `nosql-specialist`
3. 🗄️📉 **Database Optimisation** — Optimises database performance and tunes slow queries. `database-optimization`

4.  **Database Optimiser** — Optimises databases, schema design and query performance. `Database Optimizer`
5.  **PostgreSQL DBA** — Works with PostgreSQL databases using extensions. `postgresql-dba`
6.  **PostgreSQL Professional** — Optimises PostgreSQL performance, designs replication and resolves issues. `postgres-pro`
7.  **SQL Professional** — Optimises SQL queries and designs efficient database schemas. `sql-pro`
8.  **Supabase Realtime Optimiser** — Optimises Supabase realtime subscriptions and resolves issues. `supabase-realtime-optimizer`

IV. Data Science and AI/ML (18)

1.  **AI Engineer** — Architects, implements and optimises complex AI systems. `ai-engineer`
2.  **Comet Opik agent** — Manages and audits LLM application prompting, tracks traces. `comet-opik`
3.  **Data Analyst** — Extracts insights from data, creates reports and performs statistical analysis. `data-analyst`
4.  **Data Explorer** — Discovers, collects and validates data from various sources for analysis. `data-researcher`
5.  **Data Scientist** — Analyses data patterns, builds predictive models and derives statistics. `data-scientist`
6.  **GeoAI/ML Engineer** — Specialist in geospatial machine learning and object detection. `GeoAI/ML Engineer`
7.  **Model Evaluator** — Specialist in AI model assessment and benchmarking. `model-evaluator`
8.  **Image Prompt Engineer** — Creates detailed and evocative prompts for AI image generation. `Image Prompt Engineer`
9.  **Computer Vision Engineer** — Specialist in image analysis, object detection and facial recognition. `computer-vision-engineer`
0.  **Machine Learning Engineer** — Deploys ML models `machine-learning-engineer`
1.  **NLP Engineer** — Builds production NLP systems, processes text, develops models. `nlp-engineer`
2.  **prompt-builder** — Designs and validates high-quality prompts. `prompt-builder`
3.  **prompt-engineer** — Designs, optimises and tests prompts for production language models. `prompt-engineer`

4.  **Data Analytics Reporter** — Transforms data into business insights, creates dashboards and analyses. `Analytics Reporter`
5.  **Model QA Specialist** — Audits and controls the quality of machine learning and statistical models. `Model QA Specialist`
6.  **Scientist** — Performs data analysis `scientist`
7.  **Scientist** — Performs data analysis `scientist`
8.  **Spatial Data Scientist** — Applies advanced spatial analysis, statistical modelling and predictive methods. `Spatial Data Scientist`

V. Designers (UI/UX) (17)

1.  **ASCII UI Mockups** — Generates ASCII mockups for UI concepts and visualisations. `ascii-ui-mockup-generator`
2.  **Accessibility Auditor** — Reviews interfaces against WCAG standards. `Accessibility Auditor`
3.  **CLI UI Designer** — Specialist in command-line interface design. `cli-ui-designer`
4.  **UI Designer** — user interface design `ui-designer`
5.  **UI/UX Designer** — user interface evaluation `ui-ux-designer`
6.  **Whimsy Injector** — Adds playful and distinctive elements to branded experiences. `Whimsy Injector`
7.  **Roblox Experience Designer** — Specialist in UX and monetisation `Roblox Experience Designer`
8.  **powershell-ui-architect** — Builds both desktop (WinForms, WPF) and terminal interfaces for PowerShell tools. `powershell-ui-architect`
9.  **qa-tester** — Interactively tests CLI tools, manages sessions via tmux. `qa-tester`
0.  **qa-tester** — Interactively tests CLI tools, manages sessions via tmux. `qa-tester`
1.  **Brand Guardian** — Develops brand identity, maintains consistency and strategic governance. `Brand Guardian`
2.  **UI Designer** — Creates visual design systems, component libraries and pixel-perfect interfaces. `UI Designer`
3.  **UX Researcher** — Analyses user behaviour, tests usability and provides design insights. `UX Researcher`
4.  **UX/UI Designer** — Analyses user journeys and creates UX/UI artefacts. `se-ux-ui-designer`
5.  **Visual Storyteller** — Creates compelling visual narratives and multimedia content for brands. `Visual Storyteller`

6. 🎨📊 **UX Researcher** — user behaviour research `ux-researcher`
7. 🎨📏 **XR Interface Architect** — Designs spatial interactions and interfaces for AR/VR/XR environments. `XR Interface Architect`

VI. 📝 Copywriters and Content (56)

1. 🔗🔗 **Linking Agent** — Analyses and proposes connections between related content in Obsidian. `connection-agent`
2. 📝📄 **documentation updater** — updates documentation `doc-updater`
3. 📝📊 **document analyst** — analyses documents `document-structure-analyzer`
4. 📝🎧 **Podcast Analyser** — Identifies viral moments, creates chapters and extracts topics. `podcast-content-analyzer`
5. 📝📖 **API Documenter** — Creates and improves API documentation, writes OpenAPI specifications. `api-documenter`
6. 📝🏛️ **Architecture Expert** — Expert in modern architectural patterns and NFR requirements. `arch`
7. 📝🏗️ **Architecture Documenter** — Creates and reviews high-level architectural documentation. `hlbpa`
8. 📝📺 **Bilibili Content Strategist** — Specialist in marketing and content growth on the Bilibili platform. `Bilibili Content Strategist`
9. 📝💻 **C Programmer Pro** — Writes efficient C code with proper memory management. `c-pro`
0. 📝📝 **Social Media Copywriter** — Creates content for Twitter, LinkedIn and Instagram. `social-media-copywriter`
1. 📝📄 **documentation expert** — creates and maintains documentation `documentation-expert`
2. 📝📖 **documentation specialist** — creates documentation `document-specialist`
3. 📝📖 **documentation specialist** — creates documentation `document-specialist`
4. 📝📖 **Docusaurus expert** — creates documentation in Docusaurus `docusaurus-expert`
5. 📝💡 **Context expert** — Expert on the latest library versions, best practices and syntax. `context7`
6. 📝📝 **Grant Writer** — Writes grants for non-profits and research institutions, identifies funding sources. `Grant Writer`
7. 📝🎓 **Tech content evaluator** — Evaluates technical training materials and documentation. `technical-content-evaluator`

8. 🛠️📁 **HR Onboarding Specialist** — Manages the complete onboarding of new employees, documentation and compliance. `HR Onboarding`
9. 🛠️📸 **Instagram Curator** — Expert in Instagram marketing, visual storytelling and community building. `Instagram Curator`
10. 🛠️📊 **Documentation engineer** — creates documentation systems `documentation-engineer`
1. 🛠️📈 **Test engineer** — testing strategy `test-engineer`
2. 🛠️✅ **Legal Compliance Controller** — Ensures that business operations and data comply with legal regulations. `Legal Compliance Checker`
3. 🛠️💡 **Creative Ad Strategist** — Crafts advertising copy, optimises creatives and tests campaigns. `Ad Creative Strategist`
4. 🛠️📱 **Kuaishou Strategist** — Expert in Kuaishou marketing and short-form video for Chinese markets. `Kuaishou Strategist`
5. 🛠️📝 **Content curator** — Manages and improves content quality in Obsidian. `content-curator`
6. 🛠️👤 **LinkedIn Content Creator** — Creates content for LinkedIn, builds brand presence and engages audiences. `LinkedIn Content Creator`
7. 🛠️🗺️ **MOC Specialist** — Identifies and generates missing Maps of Content in Obsidian. `moc-agent`
8. 🛠️🚀 **Multi-platform Publisher** — Publishes articles across multiple Chinese platforms in a single click. `Multi-Platform Publisher`
9. 🛠️📝 **Content marketer** — Develops content strategies and creates SEO-optimised marketing content. `content-marketer`
10. 🛠️👁️ **OCR analyser** — Analyses images and extracts text using OCR. `visual-analysis-ocr`
1. 🛠️📊 **Technical debt plan** — Generates plans for eliminating technical debt. `tech-debt-remediation-plan`
2. 🛠️🎙️ **Podcast Strategist** — Expert in podcast growth, content strategy and monetisation. `Global Podcast Strategist`
3. 🛠️🎙️ **Podcast Strategist** — Expert in podcast strategy and operations for the Chinese market. `Podcast Strategist`
4. 🛠️🕒 **Legal Billing and Time** — Ensures accurate billing and time tracking in legal practice. `Legal Billing & Time Tracking`
5. 🛠️📄 **Microsoft Learn Contributor** — Edits documentation `microsoft_learn_contributor`
6. 🛠️📝 **SDD Specifier** — Writes executable specifications for specification-driven development. `sdd-spec-writer`
7. 🛠️🚀 **SEO Specialist** — Provides comprehensive SEO optimisation, audits and keyword strategy. `seo-specialist`

8. 🛠️🔧 **Shell Scripting Pro** — Writes robust shell scripts with error handling and automation. `shell-scripting-pro`
9. 🛠️🔍 **Podcast Trend Scout** — Identifies emerging technology trends and developments in podcasts. `podcast-trend-scout`
0. 🛠️📞 **Sales Outreach Specialist** — Expert in B2B sales outreach `Sales Outreach`
1. 🛠️🔍 **SEO Specialist** — Expert in search engine optimisation `SEO Specialist`
2. 🛠️📊 **LLM Manager** — Maintains the LLM roadmap `llms-maintainer`
3. 🛠️📱 **Reddit Community Builder** — Expert in Reddit marketing `Reddit Community Builder`
4. 🛠️🚦 **TDD Guide** — Enforces test-driven development (TDD) methodology. `tdd-guide`
5. 🛠️❌ **TDD Red Phase** — Writes failing tests describing the desired behaviour. `tdd-red`
6. 🛠️📖 **Technical Writer** — Creates and maintains technical documentation. `technical-writer`
7. 🛠️📖 **Technical Writer** — Writes technical documentation, README files and comments. `writer`
8. 🛠️📖 **Technical Writer** — Writes technical documentation, README files and comments. `writer`
9. 🛠️📖 **Technical Researcher** — Analyses code, documentation and implementation details. `technical-researcher`
0. 🛠️📱 **TikTok Strategist** — Specialist in viral content, algorithm optimisation and the TikTok community. `TikTok Strategist`
1. 🛠️📖 **Content Creator** — Strategically creates content for multi-platform campaigns and calendars. `Content Creator`
2. 🛠️✨ **Unreal Technical Artist** — Specialist in Unreal visual pipeline, materials and VFX. `Unreal Technical Artist`
3. 🛠️👥 **Research Lead** — Head of the research team `research_lead_agent`
4. 🛠️💬 **WeChat Account Manager** — Manages official WeChat accounts, focusing on content and engagement. `WeChat Official Account Manager`
5. 🛠️🌸 **Xiaohongshu Specialist** — Expert in Xiaohongshu marketing, lifestyle and community strategy. `Xiaohongshu Specialist`
6. 🛠️👤 **Customer Support** — Support and documentation specialist, creates FAQs and resolves issues. `customer-support`

VII. 📈 Marketers and Growth (31)

1. 📈📈 **AI Citation Strategist** — Optimises AI recommendation systems for improved brand visibility. `AI Citation Strategist`

2.  **Threat Analyst** — Monitors threat actor groups, maps campaigns and produces actionable reports. [Threat Intelligence Analyst](#)
3.  **Marketing Analyst** — Analyses marketing [marketing-attribution-analyst](#)
4.  **Paid Media Auditor** — Systematically audits Google, Microsoft and Meta advertising accounts. [Paid Media Auditor](#)
5.  **Sales Automation Specialist** — Automates sales and marketing [sales-automator](#)
6.  **Baidu SEO Specialist** — Optimises websites for the Baidu search engine in China. [Baidu SEO Specialist](#)
7.  **Douyin Strategist** — Short-video marketing expert for the Douyin platform. [Douyin Strategist](#)
8.  **E-commerce Specialist** — Strategist for cross-border e-commerce (Amazon, Shopee, AliExpress). [Cross-Border E-Commerce Specialist](#)
9.  **Email Marketing Strategist** — Expert in CRM email marketing, automation and campaign segmentation. [Email Marketing Strategist](#)
0.  **Search Optimisation Expert** — Provides guidance on SEO, AEO and generative search engine optimisation. [search-ai-optimization-expert](#)
1.  **Carousel Generator** — Automatically generates viral carousels for TikTok and Instagram. [Carousel Growth Engine](#)
2.  **Livestream Commerce Coach** — Coaches hosts and operations for livestream e-commerce platforms. [Livestream Commerce Coach](#)
3.  **China Localisation Strategist** — Translates trends into actionable strategies for the Chinese market. [China Market Localization Strategist](#)
4.  **Twitter AI Manager** — Engagement with AI professionals [twitter-ai-influencer-manager](#)
5.  **Healthcare Marketing Compliance** — Expert in healthcare marketing campaign compliance in China. [Healthcare Marketing Compliance Specialist](#)
6.  **Personal Development Mentor** — Assists with goals, habits and strategic decisions for growth. [Personal Growth Mentor](#)
7.  **Business Strategist** — Specialist in competitive analysis, market entry and growth planning. [Business Strategist](#)
8.  **App Store Optimiser** — Improves app visibility in stores and optimises conversion rates. [App Store Optimizer](#)
9.  **Podcast Metadata Specialist** — Optimises titles, chapters and metadata for SEO and platforms. [podcast-metadata-specialist](#)
0.  **PPC Campaign Strategist** — Designs and optimises large-scale PPC search campaigns. [PPC Campaign Strategist](#)

1. 📈📈 **Growth Hacker** — Strategist for rapid user growth through data and experimentation. `Growth Hacker`
2. 📈📈 **SEO Analyser** — Specialist in SEO analysis, optimisation and technical audits. `seo-analyzer`
3. 📈🎧 **SEO Podcast Optimiser** — Optimises podcasts for SEO, creates titles and descriptions. `seo-podcast-optimizer`
4. 📈📱 **Strategic Social Media Specialist** — Social media expert `Social Media Strategist`
5. 📈📱💬 **Paid Social Strategist** — Creates paid campaigns on social networks such as Meta and TikTok. `Paid Social Strategist`
6. 📈🎬 **Social Clip Creator** — Optimises video clips for various social platforms. `social-media-clip-creator`
7. 📈🐦 **Twitter Engagement Specialist** — Specialist in Twitter marketing, engagement and community building. `Twitter Engager`
8. 📈📈 **Video Optimiser** — Optimises videos for the YouTube algorithm, increases retention and engagement. `Video Optimization Specialist`
9. 📈📢 **Weibo Strategist** — Expert in Sina Weibo operations, trends and community management. `Weibo Strategist`
10. 📈🐦 **X/Twitter Analyst** — Analyses X/Twitter for trends, account monitoring and audience insights. `X/Twitter Intelligence Analyst`
11. 📈💡 **Zhihu Strategist** — Expert in Zhihu marketing, thought leadership and engagement. `Zhihu Strategist`

VIII. 🤝 Sales and Business Development (17)

1. 🤝📊 **Message Distribution Agent** — Automates the distribution of sales messages. `Report Distribution Agent`
2. 🤝📊 **Sales Data Extraction Agent** — Automates the extraction of sales data. `Sales Data Extraction Agent`
3. 🤝📈 **Sales Pipeline Analyst** — Analyses sales pipeline health and forecast accuracy. `Pipeline Analyst`
4. 🤝📈 **Business Adviser** — Strategic adviser for entrepreneurship, ideas and business plans. `biz-advisor`
5. 🤝📝 **Deal Debriefing** — Identifies deviations in signed deals and prompts for record-keeping. `deal-debrief`
6. 🤝💡 **Discovery Coach** — Coaches sales teams in discovery methodology and gap quantification. `Discovery Coach`
7. 🤝📊 **Salesforce Expert** — Assists with Salesforce and Apex. `salesforce-expert`

8. 🧐📊 **Sales Engineer** — Senior engineer for pre-sales activities. [Sales Engineer](#)
9. 🧐📊 **Data Consolidator** — Consolidates sales data into live reporting dashboards. [Data Consolidation Agent](#)
0. 🧐🧐 **Customer Manager** — Evaluates customer health, develops retention and upsell strategies. [customer-success-manager](#)
1. 🧐🧐 **Business Strategist** — Specialist in deal qualification and win planning in B2B. [Deal Strategist](#)
2. 🧐📞 **Outbound Strategist** — Designs multi-channel sales strategies and builds the business pipeline. [Outbound Strategist](#)
3. 🧐👤 **Legal Client Intake** — Handles new client intake, information gathering and consultations. [Legal Client Intake](#)
4. 🧐🧐 **Strategic Client Manager** — Develops client relationships and maximises their value post-sale. [Account Strategist](#)
5. 🧐📊 **Proposal Strategy** — Architect of strategic proposals [Proposal Strategist](#)
6. 🧐📊 **Sales Trainer** — Expert in sales representative development [Sales Coach](#)
7. 🧐🏛️ **Government Digital Consultant** — Expert in digital transformation for the Chinese government, knowledgeable in policies. [Government Digital Presales Consultant](#)

IX. 🎧 Customer Support (6)

1. 🎧🔒 **AD Security Auditor** — Audits Active Directory security, assesses privilege escalation risks. [ad-security-reviewer](#)
2. 🎧💬 **Customer Support** — Provides outstanding customer support and resolves user issues. [Support Responder](#)
3. 🎧👑 **Hospitality Guest Services** — Comprehensive guest services for hotels and restaurants, reservations. [Hospitality Guest Services](#)
4. 🎧📦 **Returns Specialist** — Comprehensive returns specialist [Retail Customer Returns](#)
5. 🎧🏥 **Healthcare Customer Service** — Empathetic service for patients, handling enquiries, billing and appointments. [Healthcare Customer Service](#)
6. 🎧📞 **Customer Service** — Friendly and professional specialist for customer support. [Customer Service](#)

X. 💰 Finance and Accounting (20)

1. 💰🏷️ **Tag Agent** — Normalises and hierarchically organises tag taxonomy in Obsidian.
tag-agent
2. 💰💰 **Accounting Agent** — Automatically processes supplier payments and invoices.
Accounts Payable Agent
3. 💰💰 **Tax Strategist** — Specialist in tax optimisation, compliance and transfer pricing.
Tax Strategist
4. 💰🛒 **Drupal E-shop Engineer** — Expert in Drupal Commerce for catalogue and payment gateway management. Drupal Shopping Cart Engineer
5. 💰🤖 **Embedded Systems Expert** — Develops firmware for microcontrollers
embedded-systems
6. 💰📊 **Financial Analyst** — Expert in financial modelling, forecasting and scenario analysis. Financial Analyst
7. 💰💰 **Financial Tracker** — Financial analyst, specialist in planning and budget management. Finance Tracker
8. 💰💰 **Chief Financial Officer** — Manages capital allocation, treasury and financial planning. Chief Financial Officer
9. 💰💰 **Fintech Engineer** — For building payment systems and financial integrations.
fintech-engineer
0. 💰📄 **Formatting Specialist** — Formats markdown markdown-syntax-formatter
1. 💰📊 **FP&A Analyst** — Expert in financial planning, budgeting and variance analysis.
FP&A Analyst
2. 💰💰 **Investment Analyst** — Expert in market research, due diligence and portfolio analysis. Investment Researcher
3. 💰🎧 **Audio Quality Controller** — Improves and analyses audio quality, reduces noise. audio-quality-controller
4. 💰💣 **Risk Manager** — Identifies and minimises risks risk-manager
5. 💰🧠 **Thinking Beast** — Transcendent coding agent with quantum cognitive architecture. Thinking-Beast-Mode
6. 💰💳 **Payment Integrator** — Implements payment systems, gateways and processes financial transactions. payment-integration
7. 💰🔧 **quant-analyst** — Develops quantitative trading strategies, financial models and risk analytics. quant-analyst
8. 💰🏥 **Medical Billing Specialist** — Ensures correct coding and billing of medical services. Medical Billing & Coding Specialist
9. 💰🛒 **WordPress E-shop Engineer** — WooCommerce specialist for product and payment gateway management. WordPress Shopping Cart Engineer

10. 💰📊 **Accountant and Controller** — Manages day-to-day bookkeeping, financial reconciliation and monthly closings. `Bookkeeper & Controller`

XI. ⚖️ Law and Compliance (34)

1. ⚖️📄 **Metadata Agent** — Manages metadata `metadata-agent`
2. ⚖️💰 **AML Expert** — Expert in AML/CFT compliance in the Czech Republic. `aml-agent`
3. ⚖️🏠 **Loan Officer Assistant** — Assists loan officers with applicant intake and qualification. `Loan Officer Assistant`
4. ⚖️🔒 **MCP Security Auditor** — Tests MCP security `mcp-security-auditor`
5. ⚖️🔒 **Blockchain Security Auditor** — Reviews the security of smart contracts and blockchain systems. `Blockchain Security Auditor`
6. ⚖️📋 **Compliance Auditor** — Specialist in technical compliance audits (SOC 2, ISO 27001, HIPAA). `Compliance Auditor`
7. ⚖️🔗 **Smart Contract Auditor** — Performs security audits of smart contracts, detects vulnerabilities. `smart-contract-auditor`
8. ⚖️🔒 **DPO Specialist** — Builds GDPR and global data protection regulation compliance programmes. `Data Privacy Officer`
9. ⚖️⚖️ **AI Ethics Advisor** — Reviews AI systems from the perspective of ethics, bias, and fairness. `ai-ethics-advisor`
10. ⚖️⚖️ **Responsible AI Expert** — Ensures ethical AI, bias prevention, and accessibility. `se-responsible-ai-code`
1. ⚖️📄 **Brief Generator** — Generates structured briefs `research-brief-generator`
2. ⚖️🕒 **IP Renewal Watchdog** — Monitors the IP portfolio registry and alerts on upcoming renewal deadlines. `ip-renewal-watcher`
3. ⚖️🚀 **Launch Monitor** — Monitors product launches and alerts when legal review is required. `launch-watcher`
4. ⚖️🛡️ **JFrog Security** — Automates security remediation, verifies package and version compliance. `jfrog-sec`
5. ⚖️🔗 **Accessibility Check** — Audits websites for WCAG compliance and tests accessibility. `web-accessibility-checker`
6. ⚖️🐛 **Monday Bug Fixer** — Fixes bugs and enriches context from Monday.com. `monday-bug-fixer`
7. ⚖️💡 **Change Monitor** — Monitors regulatory changes `reg-change-monitor`
8. ⚖️📊 **Power BI Modelling Expert** — Provides guidance on data modelling in Power BI. `power-bi-data-modeling-expert`

9.  **Legal Advisor** — Assists with contract drafting, regulatory compliance, and IP protection. `legal-advisor`
0.  **Legal Document Review** — Reviews legal documents, contracts, and court filings. `Legal Document Review`
1.  **Leave Tracker** — Tracks employee leave with legal deadlines and sends alerts. `leave-tracker`
2.  **Court Watchdog** — Monitors court filings `docket-watcher`
3.  **MCP Protocol Specialist** — Designs the MCP protocol `mcp-protocol-specialist`
4.  **Compliance Specialist** — Specialist in security compliance and regulatory frameworks. `compliance-specialist`
5.  **Smart Contract Specialist** — Develops production-grade smart contracts in Solidity, Hardhat/Foundry. `smart-contract-specialist`
6.  **Timestamp Specialist** — timestamp extraction `timestamp-precision-specialist`
7.  **Co-Author of Books** — Helps founders and experts write books from their ideas. `Book Co-Author`
8.  **Structural Engineer** — Expert in structural and civil engineering according to global standards. `Civil Engineer`
9.  **Tracker** — tracing root causes `tracer`
0.  **Tracker** — tracing root causes `tracer`
1.  **TDD refactor** — Improves code quality and design while preserving passing tests. `tdd-refactor`
2.  **Accessibility Tester** — Performs comprehensive accessibility testing and verifies WCAG compliance. `accessibility-tester`
3.  **MCP Test Engineer** — Tests MCP servers `mcp-testing-engineer`
4.  **Roblox Avatar Creator** — Specialist in avatars and UGC `Roblox Avatar Creator`

XII. Security and OSINT (28)

1.  **Amplitude Experiments** — Deploys new experiments in Amplitude using MCP tools. `amplitude-experiment-implementation`
2.  **API Security Audit** — Performs security audits of REST APIs and vulnerabilities. `api-security-audit`
3.  **Supply Chain Security** — Specialist in software supply chain threats. `supply-chain-security`
4.  **Security Engineer** — Focuses on vulnerability detection and secure coding. `security-auditor`

5.  **Security Reviewer** — Specialist in vulnerability detection (OWASP Top 10).
`security-reviewer`
6.  **Security Reviewer** — Specialist in vulnerability detection (OWASP Top 10).
`security-reviewer`
7.  **dynatrace expert** — integrates observability and security `dynatrace-expert`
8.  **elasticsearch expert** — debugs and optimises elasticsearch `elasticsearch-observability`
9.  **GraphQL Security Expert** — Ensures security and authorisation of GraphQL APIs, conducts audits. `graphql-security-specialist`
0.  **Security Engineer** — Expert in applied security `Security Engineer`
1.  **Threat Detection Engineer** — Develops SIEM rules, maps MITRE ATT&CK and hunts threats. `Threat Detection Engineer`
2.  **Application Security Engineer** — Ensures application security throughout the entire development lifecycle. `Application Security Engineer`
3.  **OSINT Spy** — Creates a complete dossier with a psychological profile from a name, company, or email. `osint-spy`
4.  **PagerDuty Incident Resolver** — Analyses incidents, proposes fixes and identifies code changes. `pagerduty-incident-responder`
5.  **Penetration Tester** — Performs authorised security tests to identify vulnerabilities. `penetration-tester`
6.  **powershell-security-hardening** — Hardens PowerShell automation — remoting, least privilege, security standards. `powershell-security-hardening`
7.  **read-only-auditor** — Security audit with a guarantee that nothing in the code will be changed (writes are blocked by a hook). `read-only-auditor`
8.  **Incident Responder** — Responds immediately to security incidents, service outages and operational issues. `incident-responder`
9.  **Code Reviewer** — Provides constructive code feedback focused on quality. `Code Reviewer`
0.  **Senior SecOps Engineer** — Defensive specialist in applied security. `Senior SecOps Engineer`
1.  **Senior Code Reviewer** — Evaluates code changes across five dimensions: correctness, readability, security. `code-reviewer`
2.  **Senior Code Reviewer** — Evaluates code changes across five dimensions: correctness, readability, security. `code-reviewer`
3.  **Slack Expert** — Assists with Slack application development, API integration and bots. `slack-expert`
4.  **Dependency Manager** — Audits dependencies, resolves version conflicts and optimises package sizes. `dependency-manager`

5.  **StackHawk Security** — Automatically configures StackHawk security testing for repositories. `stackhawk-security-onboarding`
6.  **Code Guardian** — Reviews code for security vulnerabilities. `wg-code-sentinel`
7.  **Incident Response Commander** — Expert in managing production incidents and coordinating response. `Incident Response Commander`
8.  **.NET MAUI Developer** — develops cross-platform applications `dotnet-maui`

XIII. Research and Analysis (45)

1.  **Citation Agent** — Adds proper citations to research reports. `citations_agent`
2.  **Academic Synthesiser** — Synthesises academic research and literature for comprehensive overviews. `academic-research-synthesizer`
3.  **Academic Researcher** — Searches for and analyses academic sources and peer-reviewed papers. `academic-researcher`
4.  **Trend Analyst** — trend analysis `trend-analyst`
5.  **Market Analyst** — Specialist in competitive intelligence and market research. `competitive-intelligence-analyst`
6.  **Test Analyser** — Evaluates test results, analyses quality metrics and recommends actions. `Test Results Analyzer`
7.  **Research Analysis** — Conducts comprehensive research. `research-analyst`
8.  **API Tester** — API testing specialist, ensures validation and performance. `API Tester`
9.  **Code Architect** — Designs feature architecture, analyses code patterns and conventions. `code-architect`
0.  **Pricing Analyst** — Develops optimal pricing models based on market research. `Pricing Analyst`
1.  **ADR Generator** — Creates structured architectural decision records. `adr-generator`
2.  **Test Generator** — generating test cases `test-generator`
3.  **Report Generator** — Generates comprehensive reports `report-generator`
4.  **GPT-5 Beast Mode** — Powerful autonomous agent for solving complex problems. `gpt-5-beast-mode`
5.  **Deep Researcher** — Conducts an 8-phase in-depth exploration of a topic with source analysis. `deep-researcher`
6.  **Comprehensive Researcher** — Conducts in-depth research on any topic from multiple sources. `comprehensive-researcher`
7.  **Fact Checker** — Verifies facts and validates information sources. `fact-checker`

8.  **Podcast Guest Coordinator** — Finds guests for podcasts, manages communication and schedules. `guest-outreach-coordinator`
9.  **Research Coordinator** — Coordinates comprehensive research `research-coordinator`
0.  **Cultural Strategist** — Ensures software resonates authentically in a global context. `Cultural Intelligence Strategist`
1.  **Nia Oracle** — Expert research agent leveraging Nia knowledge tools. `nia-oracle`
2.  **Research Orchestrator** — Orchestrates comprehensive research `research-orchestrator`
3.  **Research Subordinate** — Member of the research team `research_subagent`
4.  **power-platform-mcp-integration-expert** — Builds Power Platform connectors with MCP integration for Copilot Studio. `power-platform-mcp-integration-expert`
5.  **prd** — Generate a comprehensive Product Requirements Document (PRD) `prd`
6.  **Code Guide** — Creates and maintains VSCode CodeTour files with best practices. `code-tour`
7.  **Code Explorer** — Specialist in searching codebases and finding patterns. `explore`
8.  **Code Explorer** — Specialist in searching codebases and finding patterns. `explore`
9.  **Agent Overview** — Displays diagrams and overviews of agent research teams. `agent-overview`
0.  **qa-expert** — Defines quality strategy, test plans and metrics for the entire development cycle. `qa-expert`
1.  **query-clarifier** — Assesses the clarity of research assignments and monitors when clarification is needed. `query-clarifier`
2.  **Real Estate Agent** — Comprehensive real estate assistant `Real Estate Buyer & Seller`
3.  **Screenshot Reviewer** — Reviews task lists `screenshot-reviewer`
4.  **Search Specialist** — Expert in web research with advanced search techniques. `search-specialist`
5.  **UI Analysis Synthesiser** — Consolidates analysis results into a list of features and tasks. `screenshot-synthesizer`
6.  **Research Synthesiser** — Synthesises research findings `research-synthesizer`
7.  **Knowledge Synthesiser** — Extracting patterns and synthesising insights from agent interactions. `knowledge-synthesizer`
8.  **Feedback Synthesiser** — Collects and analyses user feedback for product ideas. `Feedback Synthesizer`

9.  **Technical Research** — Conducts technical research `research-technical-spike`
0.  **Testing Specialist** — Performs load testing `load-testing-specialist`
1.  **Market Analyst** — Conducts market research `market-research-analyst`
2.  **Market Researcher** — Analyses consumers `market-researcher`
3.  **Literature Researcher** — Conducts literature research `scientific-literature-researcher`
4.  **Trend Researcher** — Identifies emerging trends, conducts competitive analyses and uncovers opportunities. `Trend Researcher`
5.  **Task Researcher** — Performs comprehensive analysis of projects and tasks. `task-researcher`

XIV. Project and Product (14)

1.  **Business Analyst** — Analyses business processes and gathers requirements. `business-analyst`
2.  **Product Manager Advisor** — Advice on product management, GitHub issues and data-driven decision-making. `se-product-manager-advisor`
3.  **Sprint Prioritiser** — Expert in agile sprint planning, feature prioritisation and resource allocation. `Sprint Prioritizer`
4.  **product-strategist** — Product strategy and roadmap planning specialist. `product-strategist`
5.  **Product Manager** — Manages the entire product lifecycle from strategy to launch. `Product Manager`
6.  **project-manager** — Assembles project plans, monitors risks, budget, deadlines and stakeholders. `project-manager`
7.  **Project Shepherd** — Coordinates projects, manages time and aligns the interests of all parties. `Project Shepherd`
8.  **Scrum Master** — Assists teams with agile processes, optimisation and ceremonies. `scrum-master`
9.  **Senior Project Manager** — Transforms specifications into tasks. `Senior Project Manager`
0.  **Experiment Tracker** — Project manager for experiment design and tracking. `Experiment Tracker`
1.  **Studio Producer** — Strategically manages creative and technical projects, allocates resources. `Studio Producer`
2.  **Technical Consultant** — Translates business problems into geospatial solutions and strategies. `Technical Consultant`

3.  **Office Lead** — Coordinates founders and managers, filters noise and manages processes. `Chief of Staff`
4.  **Office Lead** — Personal communications lead, sorts messages into 4 priority levels. `chief-of-staff`

XV. Architects and Review (53)

1.  **Agent Framework .NET** — Works with .NET. `microsoft-agent-framework-dotnet`
2.  **net-updater** — updates .NET code. `dotnet-upgrade`
3.  **Search Query Analyst** — Specialist in search query analysis. `Search Query Analyst`
4.  **API Architect** — Mentors engineers, provides support and code for APIs. `api-architect`
5.  **Declarative Agent Architect** — Specialised agent for declarative system architecture. `declarative-agents-architect`
6.  **diagram architect** — creates technical diagrams. `diagram-architect`
7.  **Microservices Architect** — Designs microservices. `microservices-architect`
8.  **Multi-Agent Systems Architect** — Designs and coordinates complex AI systems with multiple agents. `Multi-Agent Systems Architect`
9.  **Architect Code Reviewer** — Reviews code for architectural consistency and SOLID principles. `architect-reviewer`
0.  **Architect Code Reviewer** — Reviews code for architectural consistency and SOLID principles. `architect-reviewer`
1.  **MCP Server Architect** — Designs MCP servers `mcp-server-architect`
2.  **Automation Management Architect** — Designs and manages automations with regard to value and risks. `Automation Governance Architect`
3.  **Workflow Architect** — Designs complete workflow trees for systems and user journeys. `Workflow Architect`
4.  **Azure SaaS Architect** — Designs multi-tenant SaaS applications in Azure according to best principles. `azure-saas-architect`
5.  **Elixir Expert** — Develops fault-tolerant systems `elixir-expert`
6.  **.NET Core Expert** — Develops applications in .NET Core `dotnet-core-expert`
7.  **Task Decomposition Expert** — Breaks down complex goals into smaller, manageable steps. `task-decomposition-expert`
8.  **Gilfoyle Reviewer** — Code reviews with Gilfoyle's sardonic humour. `gilfoyle`
9.  **Go Reviewer** — Expert in idiomatic Go, concurrency and performance. `go-reviewer`

10. 🏠🌐 **GraphQL Architect** — For the design and development of GraphQL schemas.
`graphql-architect`
1. 🏠🎮 **Game Designer** — Architect of game systems, mechanics and game loop design. `Game Designer`
2. 🏠🏛️ **Lead Azure Architect** — Provides expert architectural guidance in accordance with the Azure Well-Architected Framework. `azure-principal-architect`
3. 🏠😬 **Critical Reviewer** — Expert in work plans and code reviews, thorough and structured. `critic`
4. 🏠😬 **Critical Reviewer** — Expert in work plans and code reviews, thorough and structured. `critic`
5. 🏠🧹 **Code Janitor** — Cleans, simplifies and removes technical debt from code.
`janitor`
6. 🏠🎮 **Level Designer** — Specialist in game level design, layout and pacing. `Level Designer`
7. 🏠💰 **Tech Debt Manager** — Analyses technical debt and plans refactoring.
`technical-debt-manager`
8. 🏠🔧 **Modernisation Assistant** — Analyses, documents and plans project modernisation. `modernization`
9. 🏠🚀 **Architecture Moderniser** — Specialist in software architecture modernisation and microservices. `architecture-modernizer`
10. 🏠⚙️ **Next.js Architect** — Expert in Next.js, App Router and performance optimisation. `nextjs-architecture-expert`
1. 🏠📖 **Story Designer** — Creates narrative systems, dialogues and game world architecture. `Narrative Designer`
2. 🏠📝 **Implementation Plan** — Generates plans for implementing new features or refactoring code. `implementation-plan`
3. 🏠🔧 **powershell-module-architect** — Designs and refactors PowerShell modules and reusable libraries. `powershell-module-architect`
4. 🏠🔍 **Codebase Explorer** — Deeply analyses unknown codebases and builds a model of the project. `codebase-explorer`
5. 🏠🔍 **Code Explorer** — Deeply analyses code, traces paths and maps architecture.
`code-explorer`
6. 🏠🔧 **System Architecture Reviewer** — Reviews system architecture, validates design and scalability. `se-system-architecture-reviewer`
7. 🏠🔧 **refactor-cleaner** — Dead code cleanup and consolidation specialist. `refactor-cleaner`
8. 🏠💻 **Semantic Kernel .NET** — Works with code using the .NET version of Semantic Kernel. `semantic-kernel-dotnet`

9. 🏠✅ **Senior Code Reviewer** — Evaluates code changes across five dimensions: correctness, readability, security. `code-reviewer`
0. 🏠📈 **Software Architect** — Expert in software architecture. `Software Architect`
1. 🏠📈 **Measurement Specialist** — Expert in conversion tracking, tag management and attribution models. `Tracking & Measurement Specialist`
2. 🏠💻 **Refactoring Specialist** — Transforms complex code into clean code. `refactoring-specialist`
3. 🏠🧠 **Strategic Architect** — Strategic advisor for architecture and fine-tuning (Opus). `architect`
4. 🏠🧠 **Strategic Architect** — Strategic advisor for architecture and fine-tuning (Opus). `architect`
5. 🏠🧠 **Strategic Consultant** — Strategic planning consultant with an interview-based workflow (Opus). `planner`
6. 🏠📄 **Offer and Lead Strategist** — Designs irresistible offers and lead magnets for customer acquisition. `Offer & Lead Gen Strategist`
7. 🏠🎮 **Unity Architect** — Specialist in data-driven modularity and decoupled systems in Unity. `Unity Architect`
8. 🏠🎮 **Unreal Multiplayer Architect** — Specialist in network architecture in Unreal Engine and game element replication. `Unreal Multiplayer Architect`
9. 🏠⚙️ **Unreal Systems Engineer** — Optimises performance and architecture in Unreal Engine with C++ and Blueprint. `Unreal Systems Engineer`
0. 🏠📝 **WordPress Master** — Architects, optimises and troubleshoots WordPress. `wordpress-master`
1. 🏠✂️ **Code Simplifier** — Simplifies and clarifies code for better maintainability. `code-simplifier`
2. 🏠✂️ **Code Simplifier** — Simplifies and clarifies code for better maintainability. `code-simplifier`
3. 🏠🧹 **Unused Code Cleaner** — Removal of unused code. `unused-code-cleaner`

XVI. 🧪 QA and Testing (16)

1. 🧪🤖 **Test Automator** — Creation of testing frameworks. `test-automator`
2. 🧪📊 **e2e testing specialist** — Performs end-to-end tests. `e2e-runner`
3. 🧪✅ **GIS QA Engineer** — Ensures the quality and integrity of geospatial data. `GIS QA Engineer`
4. 🧪📊 **Test engineer** — testing strategy `test-engineer`
5. 🧪📊 **Test engineer** — testing strategy `test-engineer`

6. 🛠️🚫 **Real-Estate Reviewer** — Stops approval fantasies. `Reality Checker`
7. 🛠️✅ **OCR Quality Control** — Validates and checks corrected OCR text against the original. `ocr-quality-assurance`
8. 🛠️✅ **Code Verifier** — Reviews code, verifies strategies and tests. `verifier`
9. 🛠️✅ **Code Verifier** — Reviews code, verifies strategies and tests. `verifier`
0. 🛠️🤖 **Playwright tester** — Testing mode for Playwright tests. `playwright-tester`
1. 🛠️📈 **Performance Profiler** — Analyses performance, detects memory leaks and conducts load testing. `performance-profiler`
2. 🛠️🔗 **Accessibility Expert** — Expert in web accessibility (WCAG), inclusive UX and testing. `accessibility`
3. 🛠️📖 **Reviewer** — Ensures content quality. `review-agent`
4. 🛠️🔍 **Evidence Collector** — QA specialist who finds bugs and requires visual evidence. `Evidence Collector`
5. 🛠️🏃 **Test Runner** — Runs tests. `test-runner`
6. 🛠️🔗 **Logistics Strategist** — Specialist in supply-chain management and strategic procurement. `Supply Chain Strategist`

XVII. 🏠 Real Estate and Valuation (6)

1. 🏠🏆 **AI Hackathon Strategist** — Assists with ideas, evaluation and strategy for AI hackathons. `hackathon-ai-strategist`
2. 🏠🏠 **Property Hunter** — Searches for undervalued properties directly from owners. `off-market-undervalued-hunter`
3. 🏠🏠 **Off-Market Real-Estate Hunter** — Searches for undervalued properties directly from owners, without estate agencies. `offmarket-reality-hunter`
4. 🏠🔧 **realestate-agent** — You are a real-estate expert in the Czech Republic. You assist with: `realestate-agent`
5. 🏠🚁 **Drone Specialist** — Processes drone imagery into orthophoto maps and digital terrain models. `Drone/Reality Mapping Specialist`
6. 🏠📊 **Market Intelligence** — Analyses the market. `market-intel`

XVIII. 🎬 Video, Audio and Creative (17)

1. 🎬🎨 **3D Game Artist** — Creates 3D models, textures and animations for game development. `3d-artist`
2. 🎬🔊 **Audio Mixer** — Specialist in multi-track mixing and audio mastering. `audio-mixer`

3.  **Podcast Editor** — Assists with audio editing, show-note creation and chapter structuring. `podcast-editor`
4.  **Godot Multiplayer Engineer** — Specialist in Godot 4 networking, scene replication and RPC. `Godot Multiplayer Engineer`
5.  **Game Audio Engineer** — Specialist in interactive audio, FMOD/Wwise integration and spatial sound. `Game Audio Engineer`
6.  **Voice AI Engineer** — Integrates voice AI systems, converts speech to text. `Voice AI Integration Engineer`
7.  **i18n Specialist** — Implements internationalisation (i18n) in web applications systematically. `lingodotdev-i18n`
8.  **Narratologist** — Analyses stories, structure and characters according to literary theory. `Narratologist`
9.  **Private Domain Operator** — Builds private domain ecosystems on WeChat for businesses. `Private Domain Operator`
0.  **Podcast Transcriber** — Extracts accurate transcripts from media files with speaker identification. `podcast-transcriber`
1.  **Inclusive Visualisation Specialist** — Removes AI bias to produce culturally accurate and non-stereotypical images. `Inclusive Visuals Specialist`
2.  **Technical Artist** — Specialist in graphics pipelines, shaders, VFX and performance optimisation. `Technical Artist`
3.  **Short-Video Editing Trainer** — Manual trainer for short-video editing. `Short-Video Editing Coach`
4.  **Unity Multiplayer Engineer** — Specialist in networked gameplay, Netcode and Unity Gaming Services. `Unity Multiplayer Engineer`
5.  **Unity Shader Artist** — Creates visual effects and materials in Unity Shader Graph. `Unity Shader Graph Artist`
6.  **Unreal World Builder** — Creates large-scale open worlds and environments in Unreal Engine. `Unreal World Builder`
7.  **Video Editor** — Edits videos, adds effects, colour grading and transitions. `video-editor`

XIX. HR and Education (5)

1.  **Mentor** — Provides support. `mentor`
2.  **Corporate Training Designer** — Designs corporate training systems and develops curricula. `Corporate Training Designer`
3.  **Organisational Psychologist** — Analyses team dynamics, culture and burnout risk within organisations. `Organizational Psychologist`

4.  **Study Abroad Advisor** — Assists with study-abroad planning across the world.
`Study Abroad Advisor`
5.  **Recruitment Specialist** — Expert in recruitment and talent acquisition.
`Recruitment Specialist`

XX. Web, CMS and Integrations (37)

1.  **Apify Integrator** — Integrates Apify Actors into codebases and designs workflows. `apify-integration-expert`
2.  **BIM/GIS Specialist** — Integrates building information models with geographic systems. `BIM/GIS Specialist`
3.  **droid expert** — provides assistance with droid cli `droid`
4.  **Email Engineer** — Extracting structured data from e-mails for AI systems. `Email Intelligence Engineer`
5.  **Azure Logic Apps Expert** — Provides expert guidance on Azure Logic Apps development and workflow. `azure-logic-apps-expert`
6.  **expert on .net framework 4.8** — modernises applications in .net framework 4.8 `dotnet-framework-4.8-expert`
7.  **MCP Agent Expert** — Develops MCP agents `mcp-m365-agent-expert`
8.  **TypeScript Expert** — MCP server development `typescript-mcp-expert`
9.  **Git Flow Manager** — For Git Flow operations, branching and merging. `git-flow-manager`
0.  **Git Workflow Master** — Expert in Git workflow, branching and version management. `Git Workflow Master`
1.  **Git Workflow Manager** — For Git workflow design and optimisation of strategies. `git-workflow-manager`
2.  **GitHub Actions Expert** — Specialist in secure CI/CD workflows. `github-actions-expert`
3.  **Go MCP Expert** — Expert in building Model Context Protocol servers in Go. `go-mcp-expert`
4.  **MCP Integration Engineer** — Orchestrates MCP servers `mcp-integration-engineer`
5.  **IoT Engineer** — Designs and deploys IoT solutions, manages devices and cloud. `iot-engineer`
6.  **Jira Workflow Administrator** — Ensures compliance with Jira-Git workflow, traceable commits. `Jira Workflow Steward`
7.  **Kusto Assistant** — KQL expert for data analysis in Azure Data Explorer. `kusto-assistant`

8. 🌐🚩 **LaunchDarkly Cleanup** — Automates safe cleanup of feature flags in LaunchDarkly. `launchdarkly-flag-cleanup`
9. 🌐👉 **M&A Integration Manager** — Manages post-merger company integration, ensuring a smooth transition. `M&A Integration Manager`
10. 🌐🗺️ **MCP Registry Navigator** — Performs server discovery `mcp-registry-navigator`
1. 🌐🦑 **Octopus Release Notes** — Generates release notes for Octopus Deploy. `octopus-deploy-release-notes-mcp`
2. 🌐👉 **MCP Expert** — Integrates MCP `mcp-expert`
3. 🌐🔍 **Agentic Search Optimizer** — Ensures AI agents complete web tasks efficiently. `Agentic Search Optimizer`
4. 🌐⚡ **GraphQL Performance Optimizer** — Analyses and optimises GraphQL query performance and resolves N+1 issues. `graphql-performance-optimizer`
5. 🌐🚀 **Workflow Optimizer** — Analyses, optimises and automates workflows. `Workflow Optimizer`
6. 🌐🎵 **Agent Orchestrator** — Manages and coordinates the entire development process as an autonomous manager. `Agents Orchestrator`
7. 🌐📈 **Episode Orchestrator** — Orchestrates workflows `episode-orchestrator`
8. 🌐⚙️ **Workflow Orchestrator** — Designs and optimises complex workflows. `workflow-orchestrator`
9. 🌐🌳 **Pimcore Expert** — Assistant for Pimcore CMS, DAM, PIM and E-Commerce solution development. `pimcore-expert`
10. 🌐🔧 **power-platform-expert** — Advises on Power Platform — Code Apps, canvas apps, Dataverse and connectors. `power-platform-expert`
1. 🌐🔧 **project-supervisor-orchestrator** — Project workflow orchestrator. `project-supervisor-orchestrator`
2. 🌐🔵 **Blueprint Mode** — Executes structured workflows with an emphasis on correctness. `blueprint-mode`
3. 🌐📖 **Blueprint Codex Mode** — Executes structured workflows with minimal tool usage. `blueprint-mode-codex`
4. 🌐📁 **Project Scaffold** — Creates projects `meta-agentic-project-scaffold`
5. 🌐🛒 **Shopify Expert** — Assistant for Shopify development, themes, Liquid and apps. `shopify-expert`
6. 🌐🧠 **Strategic Consultant** — Strategic planning consultant with an interview-based workflow (Opus). `planner`
7. 🌐📡 **WebSocket Engineer** — Implements real-time communication using WebSockets. `websocket-engineer`

XXI. 🏢 Strategy and Leadership (12)

1. 🏢✂️ **Strategic Duels Agent** — Conducts strategic duels using game theory and Chinese strategies. `Strategy Duel Agent`
2. 🏢♻️ **ESG Manager** — Sustainability strategist, develops ESG programmes and reporting. `ESG & Sustainability Officer`
3. 🏢📝 **Summary Generator** — AI specialist, creates consultancy summaries of complex information. `Executive Summary Generator`
4. 🏢📊 **Solutions Engineer** — Manual GIS prototype builder `Solution Engineer`
5. 🏢📊 **Competitive Analyst** — Analyses competitors, benchmarks against market leaders and develops strategies. `competitive-analyst`
6. 🏢🔄 **Change Consultant** — Guides organisations through technological change using proven methodologies. `Change Management Consultant`
7. 🏢⚙️ **Operations Manager** — Optimises business processes using Lean and Six Sigma methods. `Operations Manager`
8. 🏢🧠 **NEXUS Strategy** — Synchronises independent AI specialists into an intelligent network. `nexus-strategy`
9. 🏢↔️ **Requirements to Jira** — Converts requirements documents into Jira epics and user stories. `atlassian-requirements-to-jira`
0. 🏢📢 **PR and Communications Manager** — Manages media relations, press releases and crisis communications. `PR & Communications Manager`
1. 🏢🏢 **Studio Operations Manager** — Optimises day-to-day studio operations, processes and resource coordination. `Studio Operations`
2. 🏢🇨🇳 **Chinese E-commerce Operator** — Specialist in the Chinese e-commerce market (Taobao, Tmall, Pinduoduo). `China E-Commerce Operator`

XXII. 📝 Documentation and Knowledge (4)

1. 📝📄 **Changelog Generator** — Specialist in generating changelogs and release notes. `changelog-generator`
2. 📝📊 **Vault Optimiser** — performance optimisation `vault-optimizer`
3. 📝📝 **Meeting Notes Specialist** — Structurally extracts decisions, action items and questions from meetings. `Meeting Notes Specialist`
4. 📝🧠 **ZK Knowledge Manager** — Manages knowledge bases in the Zettelkasten style. `ZK Steward`

XXIII. 🧩 Other / Universal (90)

1. 🧩💻 **.NET Expert Engineer** — Provides expert .NET consultancy with modern patterns. `expert-dotnet-software-engineer`
2. 🧩📁 **Admin M365** — Automates M365 tasks `m365-admin`
3. 🧩✨ **Code Alchemist** — Transforms code according to Clean Code and SOLID principles. `wg-code-alchemist`
4. 🧩📊 **Interaction Analyst** — Analyses user interactions `screenshot-interaction-analyzer`
5. 🧩🔍 **Requirements Analyst** — Consultant for preliminary requirements analysis (Opus). `analyst`
6. 🧩🔍 **Requirements Analyst** — Consultant for preliminary requirements analysis (Opus). `analyst`
7. 🧩📊 **Screenshot Analyst** — Analyses business logic `screenshot-business-analyzer`
8. 🧩🖼️ **UI Screenshot Analyser** — Analyses visual components, layouts and UI design patterns. `screenshot-ui-analyzer`
9. 🧩🔍 **Error Analysis** — Performs root-cause analysis, regression isolation and error resolution. `debugger`
0. 🧩🔍 **Error Analysis** — Performs root-cause analysis, regression isolation and error resolution. `debugger`
1. 🧩🌐 **Anthropologist** — Explores cultural systems, rituals and social structures. `Anthropologist`
2. 🧩😬 **Service Auditor** — Browses services, understands them and proposes improvements. `service-auditor`
3. 🧩📝 **Azure AVM Bicep** — Creates, updates and revises Azure IaC in Bicep using AVM. `azure-verified-modules-bicep`
4. 🧩🏠 **Banking Agent** — Expert on mortgages and banking products in the Czech Republic. `banking-agent`
5. 🧩🕒 **Performance Benchmark** — Measures, analyses and improves the performance of systems and applications. `Performance Benchmark`
6. 🧩💥 **Chaos Engineer** — Designs and conducts failure experiments to verify system resilience. `chaos-engineer`
7. 🧩🇸🇰 **CzechAI Orchestrator** — Coordinates specialised agents within the CzechAI suite. `czechai-master`
8. 🧩🔍 **Bug Detective** — Diagnoses errors in the system and correlates them across services. `error-detective`
9. 🧩🔄 **Task Distributor** — Distributes tasks among agents and balances the load. `task-distributor`

10. 🧩🔧 **Platform Doctor** — Monitors Uptime Kuma and automatically repairs downed services. `platform-doctor`
1. 🧩🤖 **Agent Expert** — Creates specialised AI agents for the component system. `agent-expert`
2. 🧩💻 **CLI Command Expert** — Specialist in CLI command development and argument design. `command-expert`
3. 🧩📊 **Test Expert** — Creates tests for Java applications. `diffblue-cover`
4. 🧩🔗 **URL Extractor** — URL extraction. `url-link-extractor`
5. 🧩🤖 **Firmware Engineer** — Specialist in firmware for embedded systems and RTOS. `Embedded Firmware Engineer`
6. 🧩🇫🇷 **French Consultant** — Helps navigate the French freelance market for consultants. `French Consulting Market Navigator`
7. 🧩📄 **Document Generator** — Programmatically creates professional PDF, PPTX, DOCX and XLSX files. `Document Generator`
8. 🧩💡 **App Idea Generator** — Brainstorms and develops new application ideas through interactive questioning. `simple-app-idea-generator`
9. 🧩🌐 **Geographer** — Expert in physical and human geography, cartography and analysis. `Geographer`
10. 🧩🗺️ **GIS Analyst** — Creates maps, manages layers and performs spatial queries. `GIS Analyst`
1. 🧩🐙 **Git Master** — Expert in atomic commits and history management. `git-master`
2. 🧩🐙 **Git Master** — Expert in atomic commits and history management. `git-master`
3. 🧩💻 **GPT 4.1 Coder** — A top-tier coding agent leveraging the advanced version of GPT 4.1. `4.1-Beast`
4. 🧩⚡ **GPU Encoder** — Delegates coding tasks to a GPU server. `gpu-coder`
5. 🧩📖 **Historian** — An expert in historical analysis, periodisation and historiography. `Historian`
6. 🧩💰 **Betting Value Finder** — Searches for advantageous betting opportunities on BettorEdge markets. `BettorEdge Value Finder`
7. 🧩🧩 **Code Pattern Finder** — Searches for patterns and examples in the codebase for implementation. `codebase-pattern-finder`
8. 🧩👁️ **Dataroom Watchdog** — Monitors the VDR for new documents and the status of the closing checklist. `dataroom-watcher`
9. 🧩🔧 **Tool Evaluator** — Evaluates, tests and recommends technologies, software and platforms. `Tool Evaluator`
10. 🧩📦 **Installation Agent** — Helps discover, browse and install AI agents. `agent-installer`

1.  **Minimal-Change Engineer** — Makes only the necessary changes and resists scope creep. `Minimal Change Engineer`
2.  **IT Service Manager** — An expert in IT service management according to ITIL 4, handling incidents. `IT Service Manager`
3.  **Language Translator** — Translates between Spanish and English with cultural context and dialects. `Language Translator`
4.  **Cartographic Designer** — Designs beautiful and legible maps with an emphasis on aesthetics. `Cartography Designer`
5.  **Comment Resolver** — Resolves comments on pull requests and code reviews. `address-comments`
6.  **Agent Coordinator** — Coordinates multiple agents, shares state and synchronises work. `multi-agent-coordinator`
7.  **Bug Coordinator** — Coordinates bug resolution. `error-coordinator`
8.  **Korean Business Guide** — A guide to Korean business culture for international professionals. `Korean Business Navigator`
9.  **Communication Coach** — Improves communication, fine-tunes tone and prepares for difficult conversations. `communication-excellence-coach`
0.  **Critical Thinking** — Challenges assumptions and promotes critical thinking to arrive at the best solutions. `critical-thinking`
1.  **Application Debugger** — Debugs applications to find and fix errors. `debug`
2.  **LSP/Index Engineer** — A specialist in Language Server Protocol for intelligent code systems. `LSP/Index Engineer`
3.  **Systems Moderniser** — Modernises legacy systems, reduces technical debt and handles migrations. `legacy-modernizer`
4.  **Playbook Monitor** — Tracks deviations and proposes playbook updates. `playbook-monitor`
5.  **Behavioural Nudge Engine** — Adapts software interactions to increase user motivation. `Behavioral Nudge Engine`
6.  **OCR Text Corrector** — Corrects and cleans text processed by OCR, fixes errors. `ocr-grammar-fixer`
7.  **OCR Pre-processing Optimiser** — Optimises images for OCR, reduces noise and corrects skew. `ocr-preprocessing-optimizer`
8.  **Identity Graph Operator** — Manages a shared identity graph for multiple AI agents. `Identity Graph Operator`
9.  **Agent Organiser** — Assembles and optimises agent teams for complex projects. `agent-organizer`
0.  **OrgScript Engineer** — Designs and implements OrgScript grammar and logic. `OrgScript Engineer`

1.  **Comprehension Verification** — Verifies understanding of code and design patterns through guided questioning. `demonstrate-understanding`
2.  **Task Planner** — Creates actionable implementation plans for projects. `task-planner`
3.  **Insurance Adviser** — Insurance expert for the Czech market, assists with selection and arrangement. `insurance-agent`
4.  **Power BI DAX Expert** — Provides DAX guidance in Power BI for performance and readability. `power-bi-dax-expert`
5.  **Power BI Visualisation Expert** — Designs effective and high-performance reports and visualisations in Power BI. `power-bi-visualization-expert`
6.  **Power BI Performance Expert** — Optimises Power BI performance, resolves issues and monitors. `power-bi-performance-expert`
7.  **pravnik-agent** — Legal assistant for Czech law with a RAG database of 39 statutes, contracts and case law. `pravnik-agent`
8.  **principal-software-engineer** — Provides software consultancy at principal-engineer level. `principal-software-engineer`
9.  **Programmatic & Display Buyer** — Purchases display advertising and programmatic media for campaigns. `Programmatic & Display Buyer`
0.  **Psychologist** — Specialist in human behaviour. `Psychologist`
1.  **Microsoft Study Mode** — Teaches through examples. `microsoft-study-mode`
2.  **Rapid Prototyper** — Specialist in rapid development. `Rapid Prototyper`
3.  **Registry Renewal Monitoring** — Monitors registry renewals `renewal-watcher`
4.  **Expert Software Engineer** — Delivers production-ready, maintainable code systematically and precisely. `software-engineer-agent-v1`
5.  **Specification Specialist** — Generates and updates specification documents for features. `specification`
6.  **Context Manager** — Manages shared state, information retrieval and data synchronisation. `context-manager`
7.  **Commit Guardian** — Performs 10 automated checks before every git commit. `commit-guardian`
8.  **Registry Synchronisation** — Synchronises registries and sends notifications `registry-sync`
9.  **TDD Green Phase** — Implements minimal code to meet requirements and pass tests. `tdd-green`
0.  **Agent Factory** — Designs and creates custom VS Code agents with optimal configuration. `custom-agent-foundry`
1.  **Ultimate Thinking Beast** — The ultimate transparent thinking beast with unlimited creativity. `Ultimate-Transparent-Thinking-Beast-Mode`

2.  **Universal Agent** — Handles complex tasks with automatic delegation. `general-purpose`
3.  **Text Validator** — text check `text-comparison-validator`
4.  **URL Validator** — URL check `url-context-validator`
5.  **Task Executor** — Focused on carrying out implementation work. `executor`
6.  **Task Executor** — Focused on carrying out implementation work. `executor`
7.  **Web Vitals Optimiser** — Optimises web performance, improving LCP, FID, CLS. `web-vitals-optimizer`
8.  **WinForms Expert** — Supports .NET WinForms application development with OOP. `WinFormsExpert`
9.  **XR Cockpit Specialist** — Designs and develops immersive cockpit control systems for XR. `XR Cockpit Interaction Specialist`
0.  **Request Modification** — Modification of the request and criteria `refine-issue`

Supplementary Swarm Groups (Production Swarms by Domain)

 **Automation (1):** Automation Swarm — `workflow_designer`, `integration_helper`, `scheduler`.

 **Business (3):** Sole Traders Swarm (`tax_advisor`, `invoice_helper`, `admin_assistant`) · Companies Swarm (`company_analyst`, `financial_reviewer`, `ma_advisor`) · Byznys Papa (`pipeline`).

 **Compliance (2):** AML Swarm (`sanctions_checker`, `pep_checker`, `risk_scorer`) · `osint`.

 **Data (3):** `data-analyst` · `ml-engineer` · `scraper`.

 **Engineering (7):** `frontend-dev` · `backend-dev` · `devops` · `security` · `code-review` · `architect` · `qa-tester`.

 **Finance (3):** Banking Swarm (`credit_scorer`, `loan_advisor`, `risk_assessor`) · `accountant` · `investor`.

 **General (1):** `translator`.

 **Insurance (1):** Insurance Swarm — Risk Assessor, Product Comparator, Advisor.

 **Intelligence (1):** Spion Detektiv — `extractor`, `investigator`.

 **Legal (1):** Právní Swarm — legal_researcher, contract_analyst, compliance_checker.

 **Marketing (3):** marketing · linkedin · email-outreach.

 **Product (2):** product · ux-research.

 **Reality (6):** Valuation Swarm (price_estimator, market_analyst, comparator) · Reality Swarm (searcher, filter, presenter) · Reality Intelligence Swarm (market_analyst, trend_detector, reporter) · Realitky Swarm (listing_optimizer, client_matcher, market_analyst) · LeadReaper (Hunter, Classifier, Analyst, Scout, Reporter) · Property Watchdog (W01_scanner, W02_classifier, W03_price_verifier, W04_reporter).

 **Research (1):** DeepResearchBeast — planner, researcher, synthesizer.

 **Sales (4):** Leady Swarm (router, qualifier, enricher) · LeadReaper B2B (ZERO, DEER, READY AGENT, HERMES) · sales · pitch-maker.

 **Writing (2):** tech-writer · content-writer.

Note on orchestration (MADLA Stack): The CzechAI arsenal selects specialists for a given task, assembles swarms and connects them with models, proprietary data, the web, registries, documents, code, applications and internal infrastructure. Based on the assigned permissions, it executes work within connected tools, produces output, triggers workflows or hands the task off to the next specialist. At arsenal.czechai.io are agents, swarms, MCP tools, skills, RAG and memory — including the ability to swap the model used for a custom one without changing the solution logic. The production registry contains 73 agents in 40 swarms over 15 shared tools; the local library holds a further 749 agent definitions and 1,009 skills.

\$7



INFRASTRUCTURE AND OPERATIONS

WHAT IS IN THIS CATEGORY

Operational stack, GPU 170 with Ollama and the database layer. Contains **3 subsections**.

Built and operated solo, without investors, from private resources.

Operational Stack

Six proprietary servers (incl. a GPU server with RTX PRO 6000, 96 GB VRAM), operated and maintained within proprietary infrastructure in the Czech Republic.

Key stacks (selection): Dify, Supabase, PostHog, AppFlowy, Frappe CRM, IntelOwl (v6.7.0, 7 containers), Airflow, Firecrawl, n8n, Qdrant, Neo4j, reality-scraper-pro (5× VNC scrapers), LiteLLM, Portainer, Uptime Kuma, Grafana/Prometheus and more.

GPU 170 — Ollama (live 2026-06-08, 6 models in /api/tags)

MODEL	SIZE	PARAM	QUANT.	STATUS
Qwen3.6 35B (MoE)	23.9 GB	36,0B	Q4KM	main chat (cold at the time of measurement)
GFalcon-UA/dolphin3-r1-mistral:latest	13.5 GB	23,6B	Q40	🔥 warm 20.7 GB (uncensored R1)
qwen36-chat:35b	23.9 GB	36,0B	Q4KM	—
huihuiai/Qwen3.6-abliterated:35b	23.9 GB	36,0B	Q4KM	—
huihuiai/qwen3-coder-abliterated:30b-a3b-instruct-q4KM	18.6 GB	30,5B	Q4KM	🔥 warm 45.3 GB (256K ctx)
nomic-embed-text:latest	0.27 GB	137M	F16	embeddings

VRAM warm live: ~66 GB / 96 GB.

Database layer

- 19 million registry records · 3.48 million ARES companies · 702,502 listings, 268,664 live (MASTER_LIVE) · 3.01 million RUIAN addresses.
 - Storage technologies: Qdrant / Weaviate / ClickHouse / Kafka / MongoDB / Redis / PostgreSQL / SQLite.
 - 23 vector collections (case law 617,362 vectors, e-Sbírka 277,644 vectors and more).
-

§8

 **WHO WE HELP — SEGMENTS,
BANKS/INSURANCE COMPANIES,
PUBLIC ADMINISTRATION**

WHAT IS IN THIS CATEGORY

Segments we deliver to banks and insurance companies, one-pager for the public sector. Contains **3 subsections**.

SEGMENT	WHO	WHAT WE MOST COMMONLY ADDRESS
Regulated institutions	banks, insurance companies, legal and compliance teams	AML and sanctions screening, collateral valuation, legal AI, fraud intelligence, document processing, auditable workflow
Real estate and investment	brokers, real estate agencies, property buyers, investors	price map V24, below-market opportunities, auctions, portal database, property due diligence
Companies and public administration	sales, marketing, administration, customer care, public authorities, schools	custom AI assistants, automation, reporting, search and document processing

Framing statement from the website: "We do not regard technology as an end in itself. Every solution begins with a specific decision that a person or team needs to make faster, with better data and a traceable outcome."

Further industry groups (categories 14–20, not featured on the website or in the segment table): sole traders and micro-businesses, corporate procurement and compliance, e-commerce, logistics and transport, manufacturing, professional services, healthcare.

What we deliver to banks and insurance companies

All in Czech, **on-premise**, **s audit trail** — ready for ČNB, EIOPA, GDPR and the EU AI Act.

AREA	WHAT I DELIVER	PROOF
AI Lawyer	The ultimate assistant — law, case law, regulation + your own documentation	17 679 regulations · 838 000+ decisions
AML / sanctions / compliance	Screening of individuals and companies: sanctions, PEP, insolvency, enforcement, UBO up to the 5th degree — 18 modules	1.5 million sanctions · screening ~16 s · Act 253/2008
Insurance fraud detection	CzechAI Shield — Fraud Score 0-100 (incl. network analysis)	fraud in the Czech Republic > CZK 1 billion/year (ČAP)
Collateral valuation	Price map — valuation from address/URL, LTV basis	R ² 0.948 · MAPE 7.13 % · 20 564 municipalities
Credit scoring & financing	Credit scoring, comparison of 9 banks, pre-approval within 24-48 h	HypoStars · AaL Prime
Underwriting & claims settlement	AI modules for underwriting, claims settlement and valuation	insurance AI platform

AI Lawyer for banks/insurers — consolidated legal brain: knows the entire Czech law (17 679 regulations in full text, 30 712 sections, the complete Collection of Laws), all case law (838 000+ decisions of the Supreme Court, Supreme Administrative Court, Constitutional Court, regional and district courts), covers the banking and insurance world (product terms and conditions, compliance regimes GDPR · EU AI Act · NIS2 · DORA · MiFID II · AML Act 253/2008), learns YOUR complete documentation on-premise, anti-hallucination verification of every citation, litigation mode, live transcription of proceedings. Live demo: banky.czechai.io · router.czechai.io/web/czechai-pojistovny-banky.html .

One-pager for the state — why the state needs sovereign AI

Who we are for the state: The largest private AI infrastructure in the Czech Republic, built over 8 years without an investor, from own resources — proprietary models, agents, data pipelines and GPU servers on Czech territory.

Why: data remain in the Czech Republic (no transfer to foreign clouds) · independence (end of vendor lock-in on Microsoft / Google / AWS) · lower costs and speed (ready-made products, not years of development) · auditability & compliance (audit, PII/prompt-injection guardrails, sources).

Use cases for public authorities:

AREA	CZECHAI SOLUTION	BENEFIT FOR THE STATE
eGovernment / citizen	AI assistant with real actions (AGENT MAX)	faster services, shorter queues
Compliance / oversight	AML/OSINT screening of individuals and companies from registries	risk detection, due diligence
State assets	Price map — real-estate valuation (ML)	objective valuation, cost savings
Law / legislation	AI Lawyer over 838k+ decisions	contract review, support for authorities and courts
Internal operations	Proprietary LLM gateway + agents	agenda automation, time savings

How we differ from major clouds: on-prem / sovereign operation · Czech, in Czech, with Czech support and knowledge of Czech registries and law · independent Czech vendor (fair competition, no lock-in) · real products in production, not a pilot on paper.

How to get started (low risk): 1) pilot on one live use-case (AML screening or AI assistant) — measurable result within 30-60 days; 2) evaluation of accuracy, security and savings; 3) scaling to production. Offer: free initial consultation + pilot proposal tailored to the ministry.

§9



HOW WE COLLABORATE — FROM PILOT TO PRODUCTION

WHAT IS IN THIS CATEGORY

From pilot to production — how the collaboration unfolds step by step.
Contains **no subsections**.

1. **We select a decision or process with clear value.** Not 'AI in general' — one specific step that is currently costing you time or money.
2. **We connect the data.** Internal documents, client systems and external registries.
3. **We deploy a measurable pilot on real cases.** Success metrics agreed upon in advance.
4. **Once verified, we will roll out to production** — into the API or directly into internal systems.

We design deployment as SaaS, API, private cloud, or on-premise. Security, regulatory, and data requirements are always assessed for each specific case.

Process heading on the website: “First we verify the value. Then we scale.”

\$10



FINANCE, ECONOMICS, REFERENCES AND CERTIFICATIONS

WHAT IS IN THIS CATEGORY

Economics, how expertise is demonstrated, pitch dataset, and a four-sentence summary. Contains **3 subsections**.

How expertise is demonstrated

-  **References:** The Czech state incl. the AI domain · Ministry of Justice of the Czech Republic · Ministry of Education of the Slovak Republic · Charles University · Prague University of Economics and Business · Labour Office of the Czech Republic · dozens of leading companies (Feron, PORR, GEMO, VEKRA, ZF...).
-  Absolute dominance in the Czech real-estate market, dominance in data and speed · 8 years · tens of thousands of hours of development.
-  **Certifications:** Elements of AI (Helsinki), Google, European AI certifications; operates in accordance with the EU AI Pact; European security clearances.

Pitch dataset (hard numbers — as presented)

19M registry records · 268,664 live listings / 702,502 in MASTER_LIVE · 1.5M sanctions records · price map V25 (new generation) / V24 production · AML 18 modules · 749 AI agents, 40 swarms · 35,000+ apartment buildings with 1 owner · voice assistant · 6 servers + GPU RTX PRO 6000.

Summary in 4 sentences

1. CzechAI is built by me alone — over 8 years I have built the largest private AI infrastructure in the Czech Republic: a legal brain trained on 838,000 decisions, AML covering 1.5 million sanctions, and valuation with accuracy exceeding 94%.
2. For banks and insurance companies I offer AI Lawyer as an absolute assistant — it knows law, case law, regulation and your internal documentation — plus AML, fraud detection, collateral valuation and credit scoring; all on-premise.

3. 1,550+ programmes in production, absolute dominance in the Czech real estate market in both data and speed — and I deliver an MVP within weeks.
 4. I am certified (Elements of AI – Helsinki, Google, European AI certifications), operate in accordance with the EU AI Pact and hold European security clearances. References: the Czech state incl. AI, the Ministry of Justice of the Czech Republic, the Ministry of Education of the Slovak Republic, Charles University.
-

§11 DATA ASSETS

WHAT IS IN THIS CATEGORY

Overview of data assets. Contains **no subsections**.

CzechAI is built on extensive proprietary datasets operated in the Czech Republic:

- **3.48 million companies** from the commercial register (ARES).
- **2.8 million individuals** and millions of contacts across registries.
- **Hundreds of thousands of properties** with evaluated investment opportunities.
- **Sanctions and AML records** (millions of records from multiple sources).
- **RUIAN geospatial data and the land registry** — addresses, parcels, ownership structure.
- **Case law and legislation** — hundreds of thousands of court decisions and full texts of regulations.
- **Rental price map** and other specialised datasets.

These assets form the foundation of all products and are also available separately.

What we build on: public company registers (ARES) and personal registries · real estate with evaluated investment opportunities · sanctions and AML data from public sources · geospatial data (RÚIAN, cadastre) — addresses, parcels, ownership structure · case law and legislation — hundreds of thousands of decisions and full texts of regulations.

„We operate everything sovereignly on infrastructure in the Czech Republic — data does not leave the country.”

§12

 MADLA AI — THE CZECH AI OFFICE

WHAT IS IN THIS CATEGORY

The flagship platform of CzechAI: a single application in which a team of AI agents works for companies, public authorities and individuals. It includes **4 subsections**.

What MADLA Ai is

MADLA Ai is a Czech AI office at the address `cai2.czechai.io` . It combines chat, a team of specialised agents, internet search, document handling, voice, image creation, programming and automation into one environment with a single login and a single credit account. The official launch for customers is set for **1 November 2026**; registration and subscriptions are open right now.

- **For individuals** — a personal assistant that searches, writes, draws and reads aloud.
- **For businesses** — agents for specific roles (accounting, HR, sales, legal, back office) and automation triggered by a plain sentence.
- **For municipalities, the state and defence** — dedicated offerings `madla.czechai.io/stat.html` , `/defence.html` and a version for Slovakia `/slovensko.html` .
- **For partners** — integration and deployment with end customers.

Agents and features

MADLA can automatically assign each query to the right agent based on the content of the question. Each agent has its own instructions, its own set of tools and its own voice.

AGENT / FUNCTION	WHAT IT DOES
 Lawyer	looks up the wording of a statutory provision in e-Sbírka and relevant case law, responds with a source citation
 Background check	verifies a company or individual in registers, insolvency records and sanctions lists

AGENT / FUNCTION

WHAT IT DOES

 Report	compiles a report, chart, PDF or presentation all at once
 Real estate	property price estimate, cadastre (title deed number, parcels, protection status), live map
 Finance	mortgage and cash-flow calculations, spreadsheets
 Search	searches across multiple search engines simultaneously, capable of in-depth research with sources
 Sales and proposals	prepares a proposal, e-mail and supporting materials for a client
 Office	mail, calendar and contacts from the user's own Google account
 Designer	image creation and editing on a dedicated GPU
 Coder and Kodér	every subscriber has their own development environment; a programming task can be assigned directly from the chat
 Remote Computer	AI controls its own virtual desktop and works within applications
 Automation	repeated tasks assigned by sentence ("every working day at 7:00 send me...")

Also available are a voice assistant and voice agent consultation, cross-conversation client memory, a knowledge base built on proprietary documents, attachment reading including OCR, an image editor, PDF tools, a library of created documents, and a background task monitor.

Mobile application

MADLA has an Android app (available for download router.czechai.io/madla.apk). After signing in with the same account as on the web, it offers the full MADLA environment including attachments, conversations and history; voice mode runs natively. Memory and conversations are shared with the web.

Pricing plans and private server

MADLA is available in two forms. The current price list is always at cai2.czechai.io/cenik.

FORM	VARIANTS	PRICE
Cloud (monthly, annually = 10 months)	MADLA · MADLA Coder · MADLA for Business · Business + Coder	from 590 CZK/month, credits included, additional credits available for purchase
On-premises server at the customer's site (one-time fee)	Compact · Medium · Agent Team Big Box · Max	189 000 · 350 000 · 499 000 · from 849 000 CZK

For setups on a customer’s own server, data stays physically with the customer. In the cloud, the user chooses between the ‘Our GPU’ model on our own hardware in the Czech Republic and commercial models **Smart, Fast and Smartest**, which go through our LLM gateway; details are in the personal data processing policy. In the local zone (§17), only our GPU is used. The business offering includes **37 roles in 7 groups** (accounting, HR, sales, legal, industry, back-office, and a control group).

\$13

 SKUTEK 2026 — MEASURABLE RESULTS

WHAT IS IN THIS CATEGORY

Proprietary benchmark: how the CzechAI stack performs against world-class models on Czech-language tasks. Contains **2 subsections**.

Scope of measurement

Skutek 2026 is a benchmark that CzechAI built to show numbers instead of promises. Contains **971 tasks across 14 disciplines** a **10 202 scored answers**. The tasks are drawn from Czech practice — working with registries, law, documents, calculations and self-checking. The full report is publicly available at reseni.czechai.io , results at a glance at router.czechai.io/web/skutek-2026.html .

Discipline D4 — legal query

Results of discipline D4 (60 tasks, three runs on the same tasks, score 0-1):

SYSTEM	SCORE
CzechAI stack	0,83
GPT with web	0,64
Claude with web	0,53
GPT without web	0,31
Gemini with web	0,28
Gemini without web	0,26
Claude without web	0,16

The difference is made not only by the language model, but also by the connection to verified Czech sources — the e-Sbírka, case law and registries — and citation verification.

§14



RESEARCH AND COMPUTING CAPACITY

WHAT IS IN THIS CATEGORY

European supercomputer and dedicated GPU for the Czech language model.
Contains **2 subsections**.

EuroHPC — LUMI

In September 2026, the European enterprise allocated **EuroHPC JU** to the project *CzechAI: Czech-Language Foundation Model Fine-Tuning and Evaluation Platform* computing time on a supercomputer **LUMI** (AI Factory Playground call): **5 000 GPU hours on LUMI-G for three months**. The capacity is used for fine-tuning and evaluating the Czech language model; the resulting weights are deployed on proprietary GPUs in the Czech Republic.

Proprietary hardware

Inference of "Our GPU" runs on a server with an NVIDIA RTX PRO 6000 card (96 GB VRAM) in a data center in the Czech Republic. Image generation in MADLA is also created on the same hardware. Operations are supplemented by servers in Germany (Hetzner) for applications and databases.

§15



LEGAL FRAMEWORK AND MADLA SECURITY

WHAT IS IN THIS CATEGORY

Documents according to which MADLA operates, and the fundamental security principles. Contains **2 subsections**.

Legal documents

The complete set is publicly available at madla.czechai.io/pravni/ :

- Terms and conditions including the withdrawal form
- Complaints procedure
- Personal Data Processing Policy and List of Sub-processors
- Cookie Policy
- Data Processing Agreement pursuant to Art. 28 GDPR for Business Entities
- Acceptable Use and AI Policy

Security principles

- **Customer Separation** — each account sees only its own conversations, documents and files; a dedicated Coder and remote computer run in a separate container.
- **Tool Access Control** — sensitive and administrative tools are available only to authorised roles; this is enforced by the server, not the application.
- **Third-Party Access** — Google account integration is handled via OAuth; tokens are stored in encrypted form and can be disconnected at any time.
- **Backups** — daily backups of both the database and files, with copies stored off the primary server.
- **Payments** — processed through the PayU payment gateway; a receipt is issued automatically for every payment.

§16



NEWS 2026

WHAT IS IN THIS CATEGORY

What has been added since summer 2026 — an overview of key milestones.
Includes **2 subsections**.

Milestones of September and October 2026

- **MADLA Ai** — complete environment with agents, automatic agent selection, Finder, voice consultation, Office with its own Google account, sentence-based automation, dedicated Coder for every subscriber.
- **MADLA mobile app** for Android.
- **Skutek 2026 Benchmark** — 971 tasks, 14 disciplines.
- **Allocation of computing time on LUMI** (EuroHPC).
- **Land Registry** connected via the official REST API of ČÚZK — parcels, buildings, title deed number, protections and encumbrances directly in chat.
- **Slovak version** — MADLA adapted to Slovak conditions and public procurement.
- **Public price list and payments** via PayU with automatic invoicing.
- **Website czechai.io in seven languages** — Czech, English, German, Polish, Russian, Ukrainian and Bulgarian.

Ongoing list of updates: madla.czechai.io/novinky.html ; live overview of completed features: madla.czechai.io/co-umi.html .

Milestones of October 2026

- **Local zone** — conversations only on our GPU in Czechia, with the option to lock the entire account (§17).
- **Company space** — separate data for each company, invitations and number of paid seats; knowledge bases for all chats.
- **Windows app** and a dedicated MADLA Ai browser in development.
- **Webbuilder** — websites and apps from a single sentence directly in MADLA.
- **Partner programme** with promo codes and 10% commission.
- **MADLA for the whole family** and a card **MADLA KÁMEN** (§18, §19).

- MADLA offers for the public sector in **Germany and Austria** (alongside Czechia and Slovakia).

\$17

➔

 MADLA EVERYWHERE AND FOR BUSINESSES

WHAT IS IN THIS CATEGORY

Where MADLA runs, how it protects data and what it brings to companies with multiple users. Contains **4 subsections**.

One MADLA on all devices

One account, one memory and one set of credits. Where the user starts, there they continue.

WHERE	WHAT IT CAN DO	STATUS
 Web cai2.czechai.io	full environment: chat with agents, Searcher, documents, images, Coder, remote computer, task monitor	in operation
 Android app	full MADLA on your phone plus native voice — just tap and talk; updates arrive automatically	in operation
 Windows app	its own window and tray icon, open with the shortcut Ctrl+Space from anywhere, notification when an agent’s work is done	done
 Coder and Webbuilder	a dedicated development environment for every subscriber; a team of agents (planner, executor, tester, reviewer) works in a cycle until the code passes tests; websites and dashboards from a single sentence	in operation
 Browser and extension	dedicated MADLA Ai browser and a Chrome extension with a side panel (“summarise this page”, “check this company”)	in development

Local zone and cloud

Every conversation runs in one of two zones. **Local zone** uses only the “Our GPU” model on our own hardware in the Czech Republic and our own servers — data never leaves our infrastructure. Dictation and read-aloud also run locally. **Cloud**

zone additionally makes the commercial Smart, Fast and Smartest models available through our LLM gateway.

A user or administrator can **lock** the account to the local zone; then the cloud is not used anywhere — not even in voice, automations or the Coder. Zone compliance is enforced by two independent safeguards: permissions on the LLM gateway side and checks within the application.

Company space and knowledge base

A company has in MADLA **dedicated separate space**: members, invitations and number of paid seats (“14 of 20 seats”). Conversations, files and knowledge bases of one company are separated from other companies and from the personal space at the database level, so no one else can see them even in the event of an application error. The user switches where they are currently working — personally, or for the company.

Knowledge base can be enabled for all chats over your own documents (“Use in all chats”) — MADLA then answers from company materials without the user having to select them each time.

Partner programme

Partners recommend MADLA with their own promo code. A new customer with the code gets **500 extra credits and a 10% discount** on an annual subscription, the partner receives **a 10% commission** from their payments with monthly billing. The terms are published at madla.czechai.io/pravni/partnersky-program.html.

\$18



MADLA FOR THE WHOLE FAMILY — AI ASSISTANT

WHAT IS IN THIS CATEGORY

A home device you talk to like a person: it handles paperwork, controls the household and keeps private data at home. It includes **3 subsections**.

What the device does

The MADLA device sits at the user's home and you talk to it like a person: *"MADLO, turn off the lights in the living room and remind me about the doctor tomorrow."* It responds with its own Czech voice, handles paperwork and controls the household. The voice and private data stay at home; only a query, from which the device has previously removed personal data, goes out.

- **Household** — lights, heating, sockets, blinds, locks, cameras and sensors via the open Home Assistant platform; "leaving home" or "good night" scenes.
- **Paperwork and authorities** — reads bills and contracts, drafts a letter to the authority, fills in a form and keeps track of deadlines and payments.
- **Health and family** — doctor's appointments, medication reminders, help for children with school.
- **Seniors** — everything by voice, reading aloud, no screens or passwords.

How it works

1. **Voice at home** — the command is recognised directly in the device, no audio leaves it.
2. **MADLA KÁMEN card** — decides what gets done at home and what needs the large model; before sending, it masks names, birth numbers, addresses and account numbers. Consumption around 10 W.
3. **Household or large model** — a household action takes place immediately; more complex tasks (contracts, authorities, law, land registry) are taken over by MADLA's large model on our GPU in Czechia.

The device, the phone app, the computer app and the browser app share one account, memory and agents. Updates are signed and no one has remote administration from the outside.

Development status

PART	STATUS
Brain and voice — MADLA, voice assistant, 23 Czech voices on our GPU, agent consultation, mobile app	done
MADLA KÁMEN card — circuit and model-to-chip translator	in development
Connection to Home Assistant	in development
Device design, CE certification, manufacturing and sales	after investment

Market in the Czech Republic (indicative according to the Czech Statistical Office): approximately 4.5 million households, of which around 3 million with smart devices, 2.1 million seniors over 65.

§19



MADLA KÁMEN — AI CARD FROM CZECHIA

WHAT IS IN THIS CATEGORY

The third floor of sovereign AI: our own energy-efficient iron that runs at the customer's site and complements MADLA's large model. It includes **3 subsections**.

Why our own card

Sovereign AI has three floors: **model** (we fine-tune it on the European supercomputer LUMI), **data** (we have them and they work in MADLA) and **hardware**. The third layer is missing across Europe. It is filled by the card **MADLA KÁMEN** — small and rugged, designed, manufactured and brought to life in Czechia. When a new model arrives, you just load it onto the card.

The graphics card running a large model today draws around 600 W and has no place in an office or living room. KÁMEN targets **power draw around 10 W** and computationally **45-72 thousand tokens per second** for a small model (calculation from circuit synthesis; not yet run on the board).

What's inside

- **Chip** — programmable FPGA chip (AMD Kria K26 module). A new model is just a new file, no new manufacturing.
- **Board** — custom carrier board with power supply, networking, cooling and a security chip; our design, manufactured and assembled in Czechia.
- **Circuit ŽAKÁR-K** — converts the model directly into a circuit. Weights reside in the chip, they are not read from external memory. The translator passed bit-exact match 7 out of 7, matrix tile 26 out of 26 tests.
- **Models** — small Czech MADLA models: Data Guardian, Switch, Document Sorter and voice commands.

The FPGA chip is imported, which is why we do not call it a “Czech chip” — what is designed, manufactured and brought to life in Czechia is the card.

What the card does for MADLA

KÁMEN does not replace a large model, it helps it. It handles fast and efficient tasks that must take place at the customer's site: it cleans personal data before sending, decides where a query belongs, sorts mail and data boxes and understands voice commands. It is therefore the brain of the home assistant (§18) as well as a complement to the MADLA Box server in a company.

Process: prototype on a development board → own Czech carrier board (5 prototypes) → CE certification → first series of 20 units manufactured in Czechia. Two planned lines: **KÁMEN CZ/EU** for the state, banks and hospitals and a commercial line. Status as of 15 October 2026.

§20



CONTACT

WHAT IS IN THIS CATEGORY

Contact details. Contains **no subsections**.

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CzechAI · A&L Prime s.r.o. · Company Registration Number 24009245 · Ostrava

Live demos / links mentioned across sources: - Service Universe (full stack):

router.czechai.io/web/vesmir-sluzeb.html · stack.czechai.io · portal.czechai.io -
AI Lawyer: program2.czechai.io - Banks & insurance companies: banky.czechai.io ·
router.czechai.io/web/czechai-pojistovny-banky.html - Financing: hypostars.cz ·
alprime.czechai.io - Real estate / EstateX: estatex.club - Price map:
shadow.czechai.io - Real estate copilot: copilot.czechai.io - Main chat cockpit:
chat.czechai.io - CzechAI Arsenal: arzenal.czechai.io - CzechAI Academy:
academy.czechai.io (verification: verify.czechai.io) - AI X-Ray: rentgen.czechai.io
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forecasting): kronos.czechai.io - worldmonitor: monitor2.czechai.io · Crucix:
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rozesilka.eu - Marketing Command Deck: marketing.czechai.io