

LEAD GEN · SALES OUTREACH · ABM

Autonomous AI Lead Generation & Sales Outreach

Dockerized platform for NL campaigns, ICP, research/scoring, HITL-gated outreach, reply→CRM sync, RAG, competitors, and ABM — built for sales ops teams that need safe automation, not a chatbot or ungated mailer.

M0–M10
MILESTONES CLOSED

PASS
PHASE 1 / 2 / 3

1.0.0
API VERSION

M10
API MILESTONE

Built by **Abdul Basit** · AI Automation Engineer

BUSINESS IMPACT

Scored pipeline · approved sends · synced CRM

Brief→HITL→send · reply classify ≥85% · HubSpot/Pipedrive/Salesforce sandboxes · ABM rank/boost · Phase gates Passed

OVERVIEW

Operators paste a natural-language brief; the system builds an ICP, discovers and enriches accounts, researches buying signals, scores with explainable dimensions, and holds human approval packages before cold email. Sequences respect deliverability limits; inbound replies classify and sync CRM sandboxes; suppression stops outreach on unsubscribe. Phase 3 adds RAG-grounded claims, reply agent policy, competitor watchlists, SMS/WhatsApp sandboxes, Teams notify, and an ABM operator queue. FastAPI owns intelligence; n8n stays thin for notify and monitors.

TYPE	Lead gen / outreach platform (not a single n8n flow)
ROLE	AI Automation Engineer / AI Systems Architect
DELIVERY	API 1.0.0 · Milestone M10 · Closeout 2026-09-11 · Milestones doc v2.1
STACK	FastAPI · n8n · Postgres · Redis · Qdrant · OpenAI · Caddy · CRM sandboxes · Slack/Teams stubs
BUYERS	Sales ops / SDR teams needing ICP, HITL, CRM hygiene, and ABM prioritization

THE PROBLEM

- Manual lists — ICP tribal knowledge
- Ungated cold email — no approval packages
- Invented claims — LLM logos/pricing
- CRM mess — duplicates, missed replies
- Silent failures — no DLQ or inbox
- No ABM queue — weak prioritization

THE SOLUTION

- FastAPI intelligence — ICP, score, RAG
- Thin n8n — notify, monitors, ticks
- HITL packages — cold / HV / pricing
- CRM factories — HS / PD / SF sandboxes
- Dashboard — approvals, inbox, ABM
- Fail-closed send — Redis + suppress

WHO IT SERVES

- Teams needing gated outreach
- Ops needing one console for HITL
- Sandbox-first demos without live ESP
- Lead demo: brief → HITL → send → CRM
- Secondary: ABM boost · competitor ingest

CAPABILITY SURFACES

SURFACE	FOCUS	SURFACE	FOCUS
Brief / ICP	NL parse · versioned criteria	Discover / enrich	Multi-source · decision-maker
Research / score	Facts vs inferences · dimensions	HITL / sequences	Cold/HV/pricing · deliverability caps
Reply / CRM	≥85% classify · HS/PD/SF sandbox	RAG / ABM / eval	Grounded claims · rank/boost · scorecards

Demo lead: NL brief → ICP → discover/enrich → research/score → approve → sandbox send → reply/CRM. **Secondary:** ABM rank/boost · competitor change · Teams notify stub. **Optional:** RAG retrieve · SMS gate without approval (403).

Architecture rule: FastAPI owns AI / gates / CRM · n8n stays thin · cold sends only after HITL · idempotent CRM writes · env-only secrets.

ARCHITECTURE & CAPABILITIES

Architecture, journey, gates, adapters

Principle: FastAPI owns ICP, research, scoring, HITL, RAG, and CRM adapters; **n8n owns thin side effects** — no god-workflow. Approval and suppression never live only in n8n.

```
Operators / email / SMS / Slack-Teams
  → Edge (Caddy :8080, FastAPI :8000, dashboard)
    → Brief → ICP → Discover/Enrich → Research/Score → HITL
      → Sequences / Send → Inbound classify → CRM sandboxes
        → RAG / Reply agent / Competitors / ABM · Postgres · Redis · Qdrant · n8n DLQ
```

COMPONENT	ROLE
API / dashboard	Auth (X-API-Key), domain APIs, operator SPA tabs
Pipeline	Brief/ICP, discover, enrich, research, score, memory
HITL / outreach	Packages, generate/send, sequences, deliverability, suppress
Reply / CRM	Inbound classify, HubSpot/Pipedrive/Salesforce sandboxes
RAG / Phase 3	Qdrant KB, reply agent, signals, competitors, channels, ABM, eval

INTELLIGENCE

- NL brief + ICP engine
- Multi-source discovery
- Research facts vs inferences
- Explainable scoring + ABM filters
- RAG + reply agent + eval cards

INTEGRATIONS

HubSpot	Sandbox upsert
Pipedrive	Sandbox upsert
Salesforce	Sandbox (M9)
GHL/Zoho/...	Waived stubs
Slack/Teams	Webhook or stub

SAFETY & OPS

- HITL before cold / HV / pricing
- Redis fail-closed on send
- Unsubscribe → suppress + stop
- Guardrails + injection tests
- DLQ replay + audit logs

LEAD DEMO PATH

- POST /brief/parse → ICP → campaign confirm
- Discover + enrich decision-maker
- Research / score → enqueue approval
- Approve → sandbox /outreach/send
- Inbound → classify → CRM upsert / suppress

HITL PACKAGE FIELDS

Prospect snapshot · proposed subject/body · score · risk_level · action_type · decision approved / edit_approved / rejected . Notify fan-out: Slack · email sandbox · Teams · dashboard with dedupe on (workspace, event, entity).

RELIABILITY · MILESTONES · GATES

Reliability, M0–M10, Phase gates, closeout

RELIABILITY AND SECURITY

AREA	WHAT SHIPPED
Auth	X-API-Key + internal HMAC
HITL	Cold / HV (≥80) / pricing packages
Suppress	Unsubscribe / bounce auto-stop
CRM	Idempotent sandbox upserts
Fail-closed	Redis down blocks send
Guardrails	Fabricated claims + injection tests
DLQ / audit	Dead-letter replay · audit_logs

MILESTONES M0–M10 (ALL COMPLETE)

ID	THEME	WHAT UNLOCKED
M0	Kickoff & architecture	Architecture v1, stack, HITL policy baseline
M1–M2	Skeleton → ICP / discover	Compose, schema, brief/ICP, multi-source enrich, dedupe
M3–M4	Research → Phase 1	Signals, scoring, approvals, guardrails, Phase 1 Passed
M5–M6	Outreach → CRM	Sandbox send, sequences, inbound classify, HS/PD sandboxes
M7	Dashboard / MVP E2E	Analytics, notify fan-out, §6.1 Passed
M8–M9	RAG → ABM / CI	Qdrant, reply agent, SF/SMS/Teams, ABM UX, backup dry-run
M10	Docs / UAT / KT	Closeout pack, UAT Pass staging, API 1.0.0, Phase 3 Passed

PIPELINE

Brief → ICP → discover → enrich → research → score.

- Decision-maker role priority
- Facts vs inferences on reports
- Dedupe check / confirm / merge
- Region allowlist fail-closed

RAG + SIGNALS

- Qdrant aa1sp_docs seed/retrieve
- Reply agent pricing → approval
- Jobs / web monitors + churn filter
- Competitor sourced summaries
- Eval scorecards stored

OPS + RECOVERY

- Dashboard tabs incl. ABM
- Notify Slack/email/Teams/inbox
- DLQ replay guidance
- CI health + backup dry-run
- Concrete: re-sync CRM ≠ new ids

Concrete reliability: pending approval → SMS 403 · suppress entry → send blocked · Redis fail-closed · Salesforce re-sync returns same record ids · Teams unset → sandbox_stub still status sent.
Unauthorized gated auto-send: 0 at Phase 1 gate.

Delivery truth: M0–M10 complete · Phase 1/2/3 Passed · uat_closeout PASS · API 1.0.0 · cite live /health in demos.

OUTCOMES · TECH · DEPTH

Stack, UAT, journeys, n8n, residual risks

TECH STACK + REPRODUCE
FastAPI · n8n · OpenAI (optional) · Postgres · Redis · Qdrant · HubSpot/Pipedrive/Salesforce sandboxes · Caddy · Compose project **aalsp** · GitHub Actions

docker compose up -d --build · python scripts/uat_closeout.py
Surfaces: /dashboard/ · /health · /docs · n8n :5678 · Auth: X-API-Key

SCOPE HONESTY

- Portfolio case study — no fake logos or fabricated reviews
- Sandbox-first email / CRM without live OAuth tenants
- Waivers: live ESP, telecom, Teams Graph, client UAT workshop
- Not a LinkedIn scraper or “one Zap → sheet” toy — full AALSP

M10 CLOSEOUT EVIDENCE INDEX

DOC	PURPOSE
UAT_SCENARIOS / RESULTS / SIGNOFF	UAT-01..15 · Pass staging · formal waivers
PRD_REQUIREMENTS_CHECKLIST	Every \$8 ID Complete / Waived
DEPLOYMENT / KT_SESSION / CREDENTIALS	Staging checklist · KT ready · rotate secrets
OPERATOR_RUNBOOK / TESTING / OPEN_RISKS	Day-2 ops · final report · residual risks
uat_closeout.py	Health M10 · 1.0.0 · CRM · ABM · Teams · RAG · docs

DASHBOARD TABS

Analytics	P0/P1 cards
Approvals	HITL decide
Inbox / ABM	Notify · rank/boost
Suppress	List entries

EVAL / CRM

Reply classify	≥85%
Scorecards	GET /eval
HS / PD / SF	Idempotent
P2 CRMs	Waived stubs

CHANNELS + SIGNALS

- SMS/WA need approval_id
- Competitor churn filter
- Jobs / web monitors
- Teams stub or webhook

N8N CATALOG (THIN CALLERS)
error/DLQ · discovery · research · score · enqueue approval · sequence enroll/tick · email inbound · notify slack/email/teams · jobs monitor · web watch · competitor watch — env API key only, no hardcoded secrets

RESIDUAL RISKS (HONEST)
Live ESP reputation · CRM OAuth consent · telecom compliance · client UAT scheduling · LLM token cost — tracked as M10 waivers; **none reopen Phase gates**. CI asserts M10/1.0.0; backup dry-run documented in m9.

SAMPLE JOURNEYS J1–J6

J1 Brief→ICP→discover	J2 Score→HITL→send	J3 Reply→CRM→suppress
J4 RAG→reply agent	J5 Competitor + SMS gate	J6 ABM rank/boost

PORTFOLIO ONE-LINER
Autonomous AI Lead Generation & Sales Outreach — FastAPI + n8n platform that turns NL briefs into ICP-qualified, HITL-gated, CRM-synced outreach with RAG, ABM, and Phase 1–3 gates Passed (API 1.0.0, M0–M10).

SYSTEM VISUALS

Architecture & before / after

