

AUTOMATION THAT SCALES BEYOND THE CLINIC FLOOR

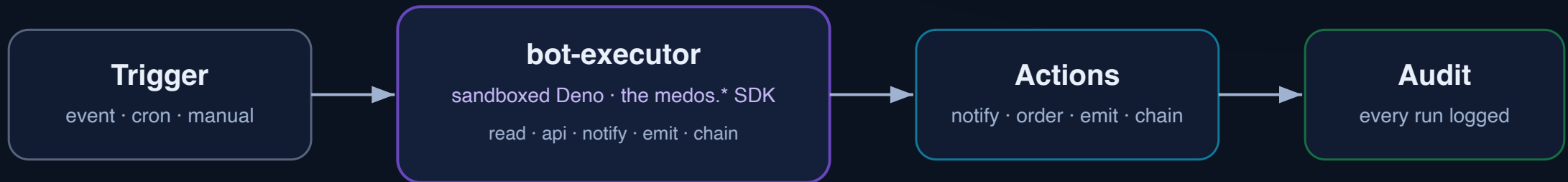
The Bot Extension Substrate

One automation engine — wired to the **HORUS decision twin**
and reusable for **PRM, marketing, insurance & intelligence.**



The engine we shipped is already domain-neutral.

Its pipeline is trigger → sandboxed execution with a capability SDK → actions → audit. Nothing in it is inherently clinical. Only three seams are clinical-flavored today — extend those and the same engine serves every domain.



You don't build an engine per domain. You extend three seams.

1

Trigger sources

What wakes a bot. Add `twin_signal`, `crm_event`, `coverage_event`, `connector_event` — each one new type + a Postgres trigger, exactly like the existing `hospital_events` path.

2

Capabilities

What a bot can do. Add SDK namespaces — `medos.twin`, `medos.crm`, `medos.coverage`, `medos.connector`, and the linchpin `medos.propose` — each capability-gated like today.

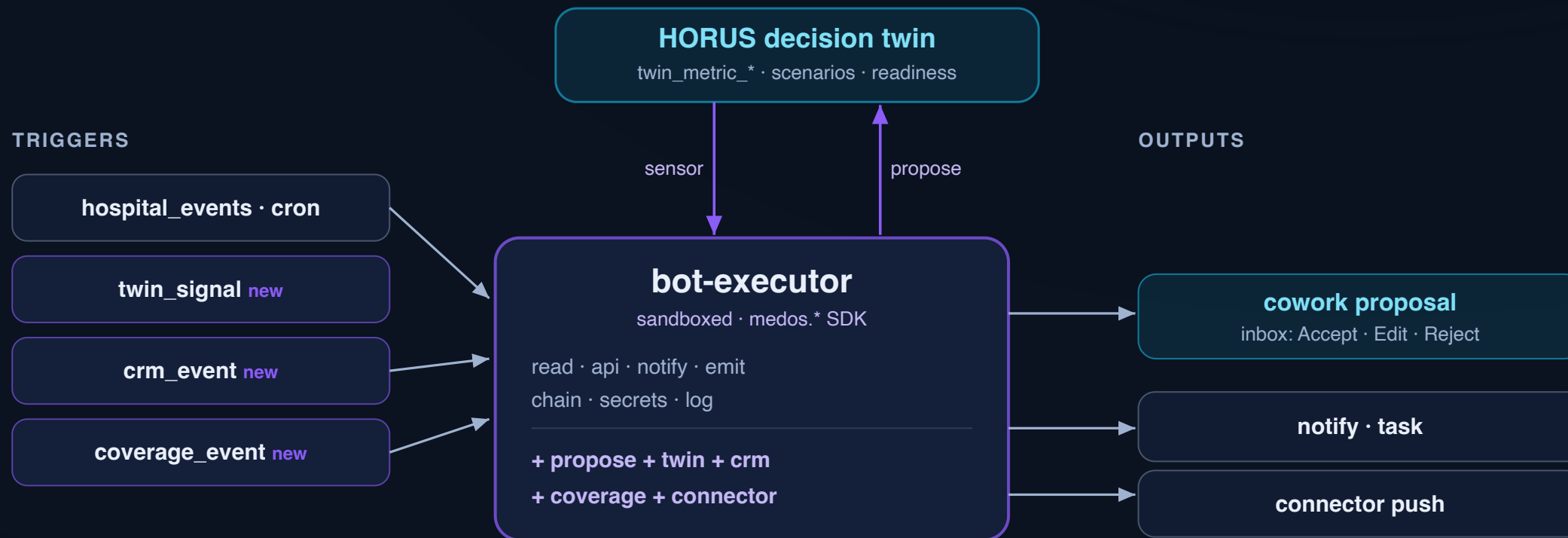
3

Plane & identity

Who it is, what it may touch. Bind each bot to a `cowork_agents` identity + a plane — Clinical / Operational / Growth — enforced at the DB-grant level.

Everything is additive. **Default config = today's clinical behavior, byte-identical.**

One engine, many domains — wired to the twin.



PLANES — enforced at the DB-grant level

Clinical

Operational

Growth · consent-walled

recommender-first — every outward / cross-plane action needs human **Accept · Edit · Reject**

One fan-in, many event streams.

The executor already switches on `trigger_config.type`. A new source is one type value plus a Postgres trigger on the source table that POSTs the executor — exactly how `notify_bot_executor()` works on `hospital_events` today.

NEW TRIGGER	FIRES WHEN...	INGRESS
twin_signal	a twin metric crosses a band, or a scenario breaches a guardrail	band-evaluator cron + trigger on scenario runs
crm_event	lead created · stage change · campaign sent · patient lapsed / no-show	trigger on the <code>crm_*</code> commercial spine
coverage_event	eligibility / authorization / scheme changes mid-encounter	trigger on <code>encounter_journey_cache.insurance_context</code>
connector_event	an external system delivered or failed a sync	trigger on <code>sync_run</code> / connector liveness
ack_event	a proposal is decided — enables chains that wait for a human	trigger on the acknowledgement tables

The `medos.*` SDK is the extension point.

The SDK is already capability-gated — service / table allow-lists, call budgets, dry-run, per-call audit. New namespaces add the same way, each behind an `allowed_capabilities` check.

`medos.twin`

Read the `twin_metric_*` RPC registry as a sensor; run a scenario read-only.

`medos.crm` · `medos.coverage`

Read / draft on the commercial spine and the insurance context — plane-gated.

`medos.connector`

Push / pull a registered external system from the connector catalog.

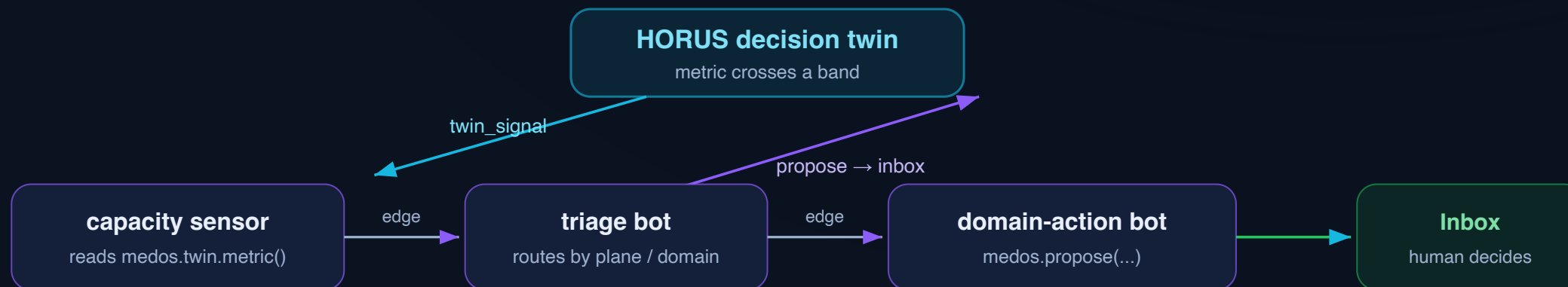
The linchpin

`medos.propose()`

Writes a `cowork_proposals` row that lands in the Acknowledgement Inbox as **Accept / Edit / Reject**.

Every outward or cross-plane action funnels through it — so a marketing or insurance bot is **exactly as safe as a clinical one**. It proposes, never acts.

Bots are the twin's sensors and actuators.



The **automation_bot_edges** graph we shipped is the wiring diagram for these cross-domain handoffs — the Bot Org Chart is the picture of the mesh.

Four domains — all data, not new engines.

DOMAIN	TRIGGER	PROPOSES	PLANE
PRM	crm_event — no-show / lapsed patient	recall outreach on a consented channel	Growth
Marketing	twin_signal — OR utilization low next week	targeted campaign to the consent-walled audience	Growth
Insurance	coverage_event — eligibility lapsed mid-stay	re-bind / preauth task for AR	Operational
Intelligence	twin_signal — forecast breach	grounded recommendation → decision-protocols, 4-role sign-off	Operational

Adding a domain = seed an **extension kit** (trigger sources + capability grants + plane + template bots) — the same **"drop seed files, zero TypeScript"** idiom as market packs and connector packs.

Most of the substrate already ships.

✓ Twin metric registry

twin_metric_* RPCs with a uniform signature + seed fail-soft. Watching a metric = one row.

✓ Cowork proposals + inbox

cowork_agents identity, cowork_proposals, and Accept/Edit/Reject already shipped.

✓ CRM commercial spine

contacts · opportunities · campaigns · consents · the marketing audience view.

✓ Connector catalog

48 connectors + liveness + topology — the push / pull surface.

✓ Bot Org Chart

The graph + edges we just shipped — already the management + wiring surface.

→ Net-new

The SDK namespaces, the new trigger dispatch, a few columns on automation_bots.

P0 is demo-ready and carries zero clinical risk.

P0

Twin sensor + propose

medos.twin + medos.propose · twin_signal
trigger · plane swimlanes · one cardiac-capacity
bot end to end

P1

PRM / Marketing kit

crm_event + medos.crm, Growth plane,
consent-gated

P2

Insurance kit

coverage_event + medos.coverage

P3

Auto-chaining

the edges graph drives runtime — executor
fires downstream bots on success

THE TAKEAWAY

One engine. Three seams. Every domain —
and nothing acts without a human.

