

FastYoke DB — Board Brief

Prepared for executive and board review · www.fastyoke.io/db

Executive summary

FastYoke is built on **per-tenant SQLite** for a reason — isolation at the operating-system layer, locality at the file layer, and an ejection clause that's a single download. **FastYoke DB (fyDB)** is what we built for workloads that need a different shape: **HA, geo, DR, and multi-region writes**.

FastYoke DB is a **managed service**: FastYoke provisions and operates the distributed cluster on your behalf, hosted on **YugabyteDB Aeon** or **CockroachDB Cloud**. Application code, migrations, and the append-only audit trail are **unchanged**. You don't choose between "FastYoke" and "FastYoke DB" — you choose **substrates on a per-tenant basis**, with the same application running across both.

Substrate architecture

FASTYOKE APPLICATION — UNCHANGED

Finite state machine · Sandboxed guards (Wasm) · Append-only event log · Role-gated APIs · Marketplace apps

FASTYOKE DB PORTABILITY LAYER

Dialect translation · Capability probe · Shared migrations · fy db migrate
LISTEN/NOTIFY · SKIP LOCKED · JSONB light up on Yugabyte; graceful fallback on SQLite.

PER-TENANT SUBSTRATE CHOICE

Per-tenant SQLite DEFAULT
Dedicated .db file · OS-level isolation · single VM /
Runtime

FastYoke DB ENTERPRISE+
Distributed SQL · HA · geo · DR · multi-region writes
YugabyteDB Aeon · CockroachDB Cloud · BYOC

↔ *promote / demote (roadmap) — same audit trail carries forward*

MANAGED BY FASTYOKE

YugabyteDB Aeon · CockroachDB Cloud

BRING YOUR OWN CLUSTER

On-Prem Enterprise+ · same SDK & migrations

Do you need FastYoke DB?

Need HA, geo, DR, or multi-region writes? → FastYoke DB (YugabyteDB Aeon, CockroachDB Cloud, or bring-your-own cluster).

Otherwise → per-tenant SQLite — simpler, lower cost, same application code.

Engine choice

ENGINE	HOSTING	BEST FOR
YugabyteDB Aeon	Managed by FastYoke on YugabyteDB Aeon	Apache 2.0 OSS posture; Postgres wire protocol; healthcare and financial-services workloads
CockroachDB Cloud	Managed by FastYoke on CockroachDB Cloud	Geo-distributed consistent global writes; strong change-feed story
Bring your own cluster	Customer-operated Yugabyte or Cockroach	On-Prem Enterprise+ private-cloud sovereignty; same portability layer

Portability guarantees

- **SQLite** → **FastYoke DB**. Application code authored against the per-tenant SQLite contract runs on a distributed shard without rewriting handlers.
- **FastYoke DB** → **SQLite**. Export back to a per-tenant SQLite file for forensics, test scaffolding, or eject.
- **Same migrations directory**. Operators run `fy db migrate` once; both fleets stay in sync.
- **Same audit trail**. Event-log history carries forward byte-for-byte when a tenant is promoted to a distributed shard.

Honest tradeoffs

- Per-tenant SQLite remains the **right default** for most workloads.
- **Enterprise+ contract** required for fully managed FastYoke DB hosting.
- Distributed SQL costs more per tenant — the payoff is HA, geo, or DR with strict SLA requirements.
- **YugabyteDB is Apache 2.0; CockroachDB is BSL** — procurement should decide licence posture before engine choice.
- FastYoke DB is **OLTP-shaped**, not an analytics warehouse replacement.

Next steps

- **Early access & procurement:** [Request early access](#) · security@fastyoke.io (subject: *FastYoke DB*)
- **Architecture commitment:** [Why per-tenant database files](#)
- **On-Prem + BYOC:** [On-Prem overview](#)