

zapier.georgelambert.org · Markdown indexes

VERAE TIME × ZAPIER

01 system

site/packages/overview/01-system.md

1. System

Verae Time proves a SHA-256 existed at a given time. Zapier lets customers register and look up hashes from the tools they already use. Billing and API keys live on **zappier-edge**. Timestamping, wait, webhooks, and archive fan-out live behind **verae-middleware**. Durable messaging is the **central Verae NATS.IO 3-server JetStream cluster**.

Hard rule

Zapier never connects to NATS, tree nodes, WORM archives, or `api.veraetime.net`. Those hops are middleware and workers only. If a trace ever shows a Zapier hop on a `verae.*` subject, do not push the app.

Planes

Plane	What	Network
Zapier cloud	<code>verae-zapier-app</code> via access-zapier	HTTPS to <code>:3024</code> only (not NATS)
Direct web	<code>verae-access-web</code> customer browser	HTTPS <code>:3021</code>
Direct customer API	<code>verae-access-api</code> x- <code>api-key</code>	HTTPS <code>:3022</code>
S2S leaf	<code>verae-access-leaf</code>	NATS <code>verae.access.leaf.in</code> / HTTPS <code>:3023</code>
Authz	<code>verae-access-authz</code>	<code>verae.access.authz.check</code> before any internal subject
Commercial edge	<code>zappier-edge</code> portal, admin, Stripe	Loopback <code>:3000</code> ; public doors are access-*
Account balance	<code>zappier-account-balance</code> prepaid SoT	NATS <code>verae.billing.*</code> + HTTP <code>:3010</code>
CS / sales / accounting	<code>zappier-customer-service</code> , <code>zappier-sales-pricing</code> , <code>zappier-accounting-export</code>	Private HTTP; NATS statement/adjust
Middleware HTTP	<code>/zapier/v1/*</code> job id + wait	HTTPS from access-zapier / loopback edge
NATS cluster	JetStream subjects under <code>verae.*</code>	Private; loopback or SSH tunnel
Workers	poller, webhook-deliver, aggregator	NATS + HTTPS to chain or Zapier hooks
Archives	WORM + tree nodes	NATS broadcast query; bloom miss = silence
Chain	Verae timestamping	HTTPS <code>api.veraetime.net</code> or MOCK
Control	<code>verae-fleet</code>	Operator HTTP <code>:3850</code> on <code>0.0.0.0</code> ; SSH to extra machines

Request in one sentence

A Zap step POSTs to zappier-edge (`x-api-key`); edge meters the call and, when `ZAPPIER_UPSTREAM` is set, forwards timestamp/receipt/hash to middleware `/zapier/v1`. Middleware splits hash vs files, writes the hash (or Merkle root) to the chain, publishes `verae.zapier.jobs.watch`, and either returns `jobId` or waits on `verae.zapier.jobs.events`. Meter events, CS credits, and portal reloads go over NATS `verae.billing.*` to **account-balance** (source of truth). Customers review the same statement in the portal; CS (`:3011`) and sales (`:3012`) review it on their department UIs. Attached metadata and bulk-summary **leaves** are found later by broadcasting `verae.archive.query` to every archive/tree node.

See [diagrams](#).