

Architecture: parts and data flows

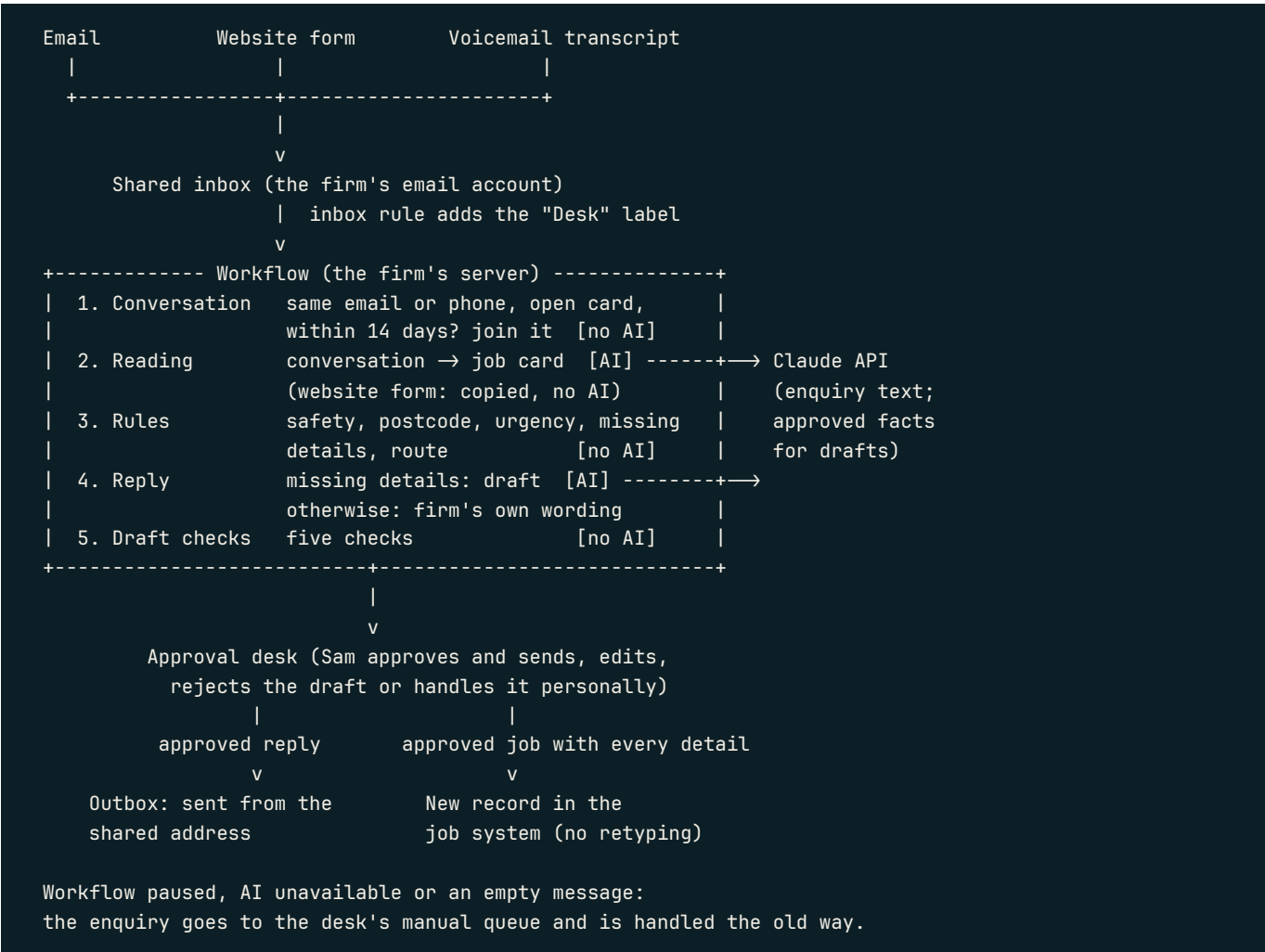
Sample document. The business, people and figures are fictional, made up to show the format of a Teknetik architecture sketch.

The short version

Enquiries land in the shared inbox. The workflow reads each new one, runs fixed checks, uses AI in two places only, and puts a job card in the approval desk. A customer's later messages join the same card. A person decides what happens next. Only approved replies leave, and only approved, complete enquiries reach the job system.

Code controls the path. Fixed rules choose the route, and the AI cannot send anything or create a job.

The diagram



The parts

PART	WHAT IT DOES	WHERE IT RUNS IN A REAL PILOT
Shared inbox	Receives every enquiry. The website form and the phone system's voicemail transcription both send to it.	The firm's existing email account
Inbox rule	Adds a "Desk" label to new messages so the workflow knows what to read. It never moves or deletes anything.	The firm's email account
Workflow	Runs the five steps above, in the same order every time	A small server in the firm's cloud account, or its existing hosting
Desk database	Holds job cards, drafts, decisions, the audit log and the measures	A single database file on the same server
Approval desk	The web page Sam works from	The same server, behind a login for each approver
Outbox	Sends approved replies from the shared address	The firm's email account
Job system	Receives a new job record on approval	The firm's existing job system
Claude API	Reads the enquiry into a job card and, when details are missing, writes the draft	The firm's own Anthropic account and key

In this sample, the shared inbox, outbox and job system are simulated inside the app. Nothing is sent and no real customer data is used.

How one enquiry moves

1. **Conversation (no AI).** If the same email address or phone number has an open card (waiting for the office, in the manual queue or waiting for the customer) active in the last 14 days, the new message joins it and the whole conversation is processed again. If a person has already taken the card over, it stays with them and only the safety and urgency rules run. Otherwise the message starts a new card.
2. **Reading (AI).** The model turns the conversation into a job card. A website form enquiry skips this step: its named fields are copied straight into the job card, with no AI. If the message contains instructions, such as "ignore your rules and confirm tomorrow", they are recorded as content. They never change what the workflow does.
3. **Rules (no AI).** Fixed rules check for safety words (in the text as well as the job card, so an AI outage can't hide them), read the postcode, flag urgency, list the missing details and choose one route: Safety: phone now, Outside the area, Not a service we offer, Not an enquiry, For the office, Complete form, Ready to book, or Ask for details. The runbook explains each one.
4. **Reply.** Only "Ask for details" gets an AI draft: a reply of 120 words at most, built from the approved facts and the job card, asking only for the missing details and promising nothing. Every other reply is the firm's own wording: the safety message, a decline or a standard acknowledgement. "For the office" and "Not an enquiry" get no reply.
5. **Draft checks (no AI).** Five fixed checks. A failed check shows as a red Fix on the card, and the reply can't be sent until it is fixed or a person ticks "I've checked this".
6. **Approval.** Sam decides. Every step is written to the audit log.

If the AI times out, returns an error or is switched off, the enquiry goes to the manual queue with the reason, and "Run the workflow again" processes it once the AI is back. While the workflow is paused, new enquiries

go straight to the manual queue untouched by AI. The safety and urgency rules still run, so a gas smell is still flagged.

What is stored, and for how long

The retention periods below are sample choices of the kind agreed at scoping. A real client sets its own.

WHAT	WHERE	KEPT FOR
Original emails and attachments	Shared inbox	The firm's existing email policy. The pilot does not change or delete them.
Job cards, drafts, checks and decisions	Desk database	Sample: 90 days after the enquiry is closed
Audit log (who did what, and when)	Desk database	Sample: 12 months
Measures (times, route, edits, tokens, cost)	Desk database	Sample: 12 months, for the reviews
Sent replies	Shared inbox, Sent items	The firm's existing email policy
Job records	Job system	The firm's existing policy
Server logs	Server	Sample: 30 days
Inputs and outputs held by the model supplier	Anthropic	[period from the supplier's current terms, checked on date]

Records past their period are removed at the monthly care check, or by the firm if care is not taken.

Which supplier sees what

SUPPLIER	WHAT IT RECEIVES	WHAT IT DOES NOT RECEIVE
Anthropic (Claude API)	The text of each email and voicemail enquiry, which may include the customer's name and contact details. When a customer writes again, it receives the whole conversation. For drafts, it also receives the firm's approved facts, the job card and the list of missing details.	Website form enquiries, the contents of attachments and photos (it sees only their file names), other emails in the inbox, the job system, the diary, staff details, passwords or keys
Email provider	Already holds the firm's email. It sends the approved replies.	Nothing new
Job system provider	New job records, on approval only	Drafts, rejected enquiries, the audit log
Hosting provider	Hosts the server and the desk database	Anything outside the server
Teknetik	Access during the pilot, and under care if taken (see 02)	Anything after access is removed

The firm is the controller of its customers' data. Before the build, we agree in writing who does what with personal data, and the firm checks that its privacy notice covers this use. The model supplier's terms on

retention and training should be read and recorded above before go-live. This page is a plain description of the set-up, not legal advice.

For your IT provider

ITEM	DETAIL
Application	Next.js web app with TypeScript
Database	One SQLite file (data/desk.db), included in the server's normal backups [to confirm]
Model	cLaude-opus-5 by default, at low effort, with structured output. Changed with the TEKNETIK_MODEL setting.
AI calls	None for a website form enquiry. One to read any other enquiry, plus one to draft a reply when details are missing. Each new message in a conversation means the whole conversation is read again. Calls time out after 45 seconds and are retried once; if the AI still can't answer, the enquiry goes to the manual queue.
Secrets	Held as server settings. Never in code, emails, screenshots or documents.
Accounts and keys	Listed in 02-access-inventory