OVANCE · ARCHITECTURE

An incoming call, end to end

Violet: the person — Cyan: the AI — Follow the numbers 1 to 8 — Cyan edge below: on the call path

1 A call comes in

Phone network



- **One shield number per person.** One person, one account, one number.
- **Rings first.** Two rings by default before anything answers, so it feels like a phone.

2 The carrier hands it over

Phone carrier



- **The number belongs to a carrier.** A call is answered only when it arrives through the carrier that owns that number.
- **Signed webhook.** Every request is checked against the carrier's signature before anything else happens.
- **Live audio.** Phone-quality audio flows both ways over one open connection.

3 The voice engine picks up

Voice engine



- **Who is being called.** Finds the account behind the number without ever storing the number in the clear.
- **Who is calling.** Works out the caller from the contact list and the carrier only, never from what the caller says.
- **Call session.** One state machine per call.
- **Greeting.** The opening line is voiced ahead of time, so it plays at once.
- **Database.** Every row belongs to one account, and the database itself refuses to show it to another.
- **Key vault.** Each account has its own key.

4 Listening

Speech service



- **Knows voices, not people.** The speech service never learns which account a call belongs to.
- **Hearing the end of a turn.** It tells a finished thought from a pause, and "mm-hm" from a real interruption.
- **Speech to text.** The caller's words arrive as text within a fraction of a second.

continues at 5 ↙

the reply returns to the caller ↑

5 One turn of the conversation

Under a second



`Narrow → Think → Decide → Check → Speak`

- **Narrow.** The owner's rules for this caller cut every possible response down to the few that are allowed.
- **Think.** The language model reads the words, the allowed actions and what it remembers about this caller.
- **Decide.** The first thing it says is a decision: keep talking, or hand the call somewhere.
- **Check.** Every sentence is checked before it is spoken.
- **Speak.** Each sentence is voiced the moment it is ready.

6 What the moment needs

The owner's rules



`Keep talking → Take a message → Ring the owner → Decline`

- **Keep talking.** Answer, ask, arrange.
- **Take a message.** A greeting in the owner's voice, then the caller leaves a voicemail.
- **Ring the owner.** The call is passed to the owner's own phone, showing the real caller.
- **Decline.** A polite no, or a busy signal, for callers the owner does not want to reach them.

7 After the call

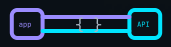
Memory, per contact



- **The record.** The transcript and timings are stored encrypted under the account's own key.
- **A note for next time.** One short running note per contact, so the next call picks up where this one ended.
- **A second look.** The call is reviewed for anything the owner should see.
- **Audio.** Recordings and voicemails are kept as files, never in the database.
- **File storage.** Voice samples, recordings and message media live here, reachable only through the API.

8 The owner finds out

Platform API · Your app



- **A signed event.** The app is told that something happened, with ids and counts only, never content.
- **Read live, never copied.** Transcripts, recordings and contacts are read from the API each time.
- **Keys stay on the server.** The app's API keys never reach a browser.

THE EDGE
- Domain and DNS
- Mail

OUR SERVICES
- Voice engine
- Speech service
- Platform API
- Console

DATA
- Database
- Key vault
- File storage

MODELS
- Speech models
- Language models, cloud
- Language models, local

CARRIERS
- Phone carrier

BEYOND THE CALL
- Onboarding and voice
- Texts and replies
- Deeper recall

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