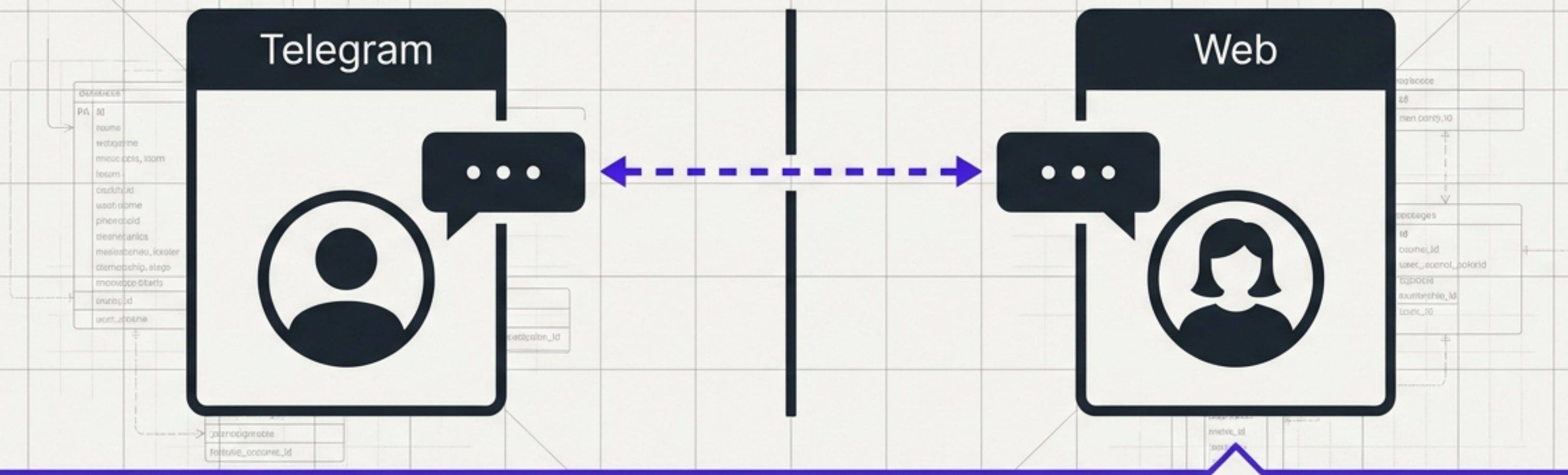


# Mio v0.1.5: One User, Every Platform

Engineering the shift from fragmented chat bots to a unified, omnipresent AI companion.



# The Illusion of Message Sync

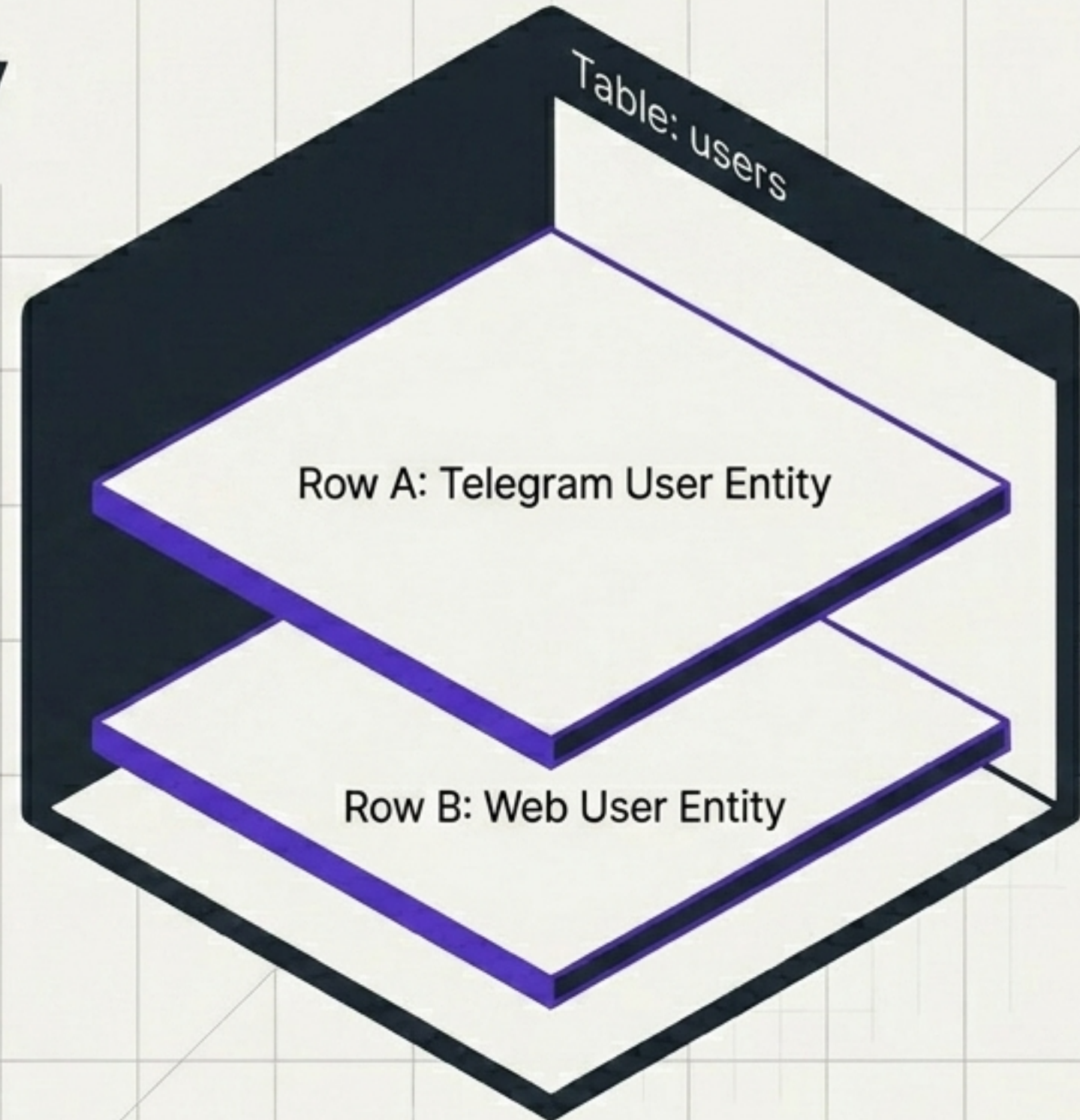


Chat sync stitched the messages together, but the underlying identities were still disconnected.

- v0.1.4 successfully shipped cross-platform chat sync, merging timelines.
- This exposed a deeper flaw: A user changing a nickname on the web or evolving a relationship stage on Telegram left the other platform entirely unaware.

# The Database Reality

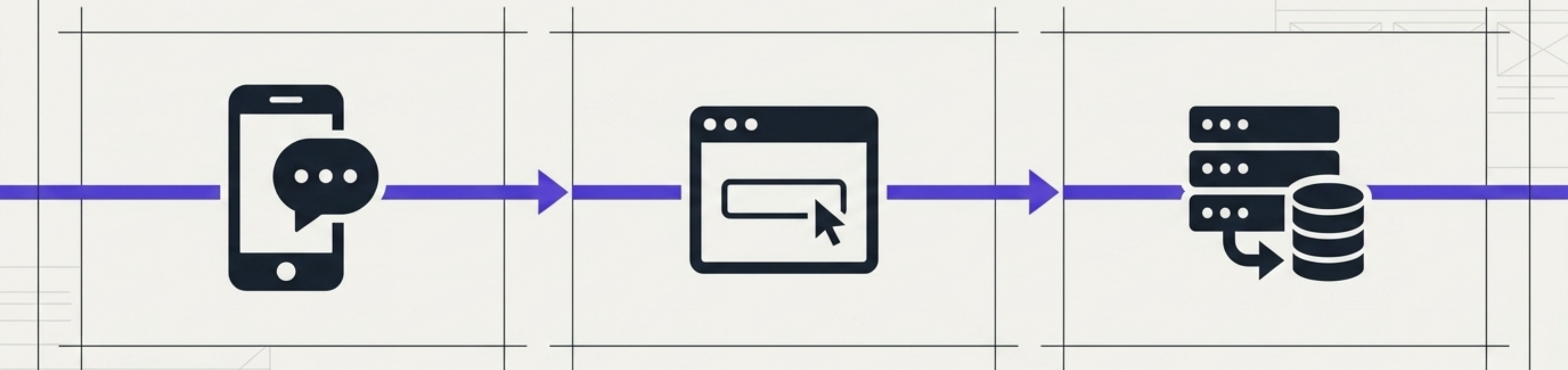
The root cause of the identity gap was architectural. A single human interacting with Mio across two platforms was treated as two isolated database entities.



**Insight:** We needed a secure, frictionless mechanism to declare these two rows are the same person and collapse them permanently.

# Frictionless Account Linking

No OAuth redirects. No QR codes. No email verification. A dead-simple flow designed for immediate bridging.



## Node 1: Telegram

User types `/link`. The bot generates and DMs a secure 6-character alphanumeric token.

## Node 2: Web Application

User navigates to the web app and pastes the token into a simple input field.

## Node 3: Backend Resolution

The system validates the token and permanently merges the fragmented identities.

# The No-Confusables Math

A	B	C	D	E	F	G	H
<del>I</del>	J	K	L	M	N	<del>O</del>	P
Q	R	S	T	U	V	W	X
Y	Z	<del>0</del>	<del>1</del>	2	3	4	5
6	7	8	9				

24 Letters + 8 Digits = 32 Valid Characters

**$32^6 = \sim 1$  Billion Combinations**

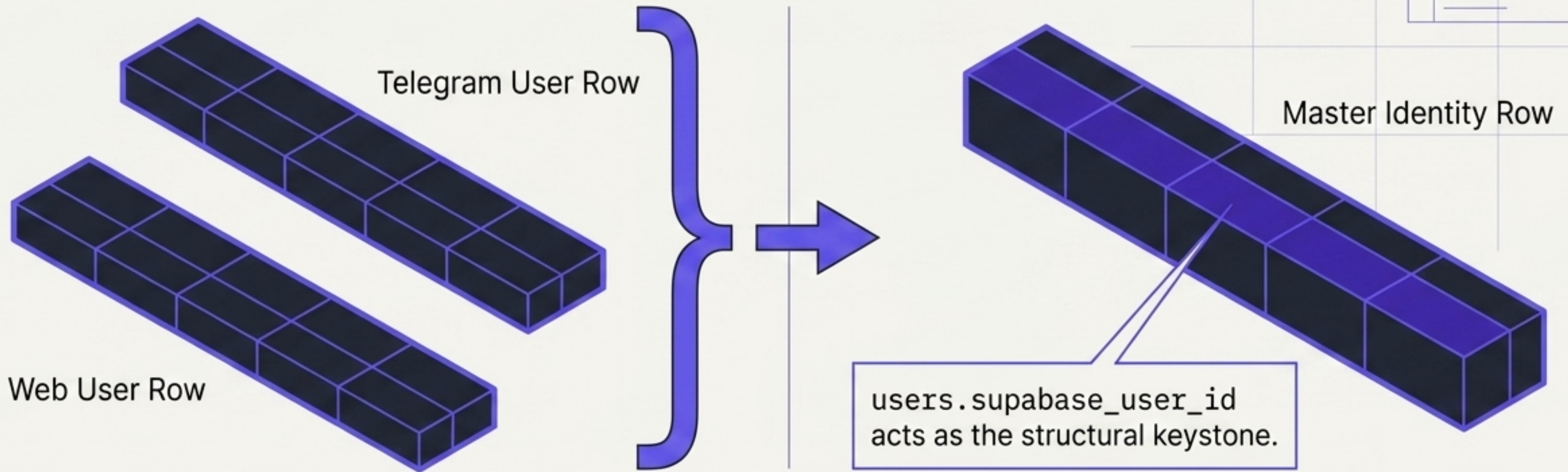
## Absolute Clarity

Eliminates the classic “is that an O or a 0?” friction.

## Strict Expiry

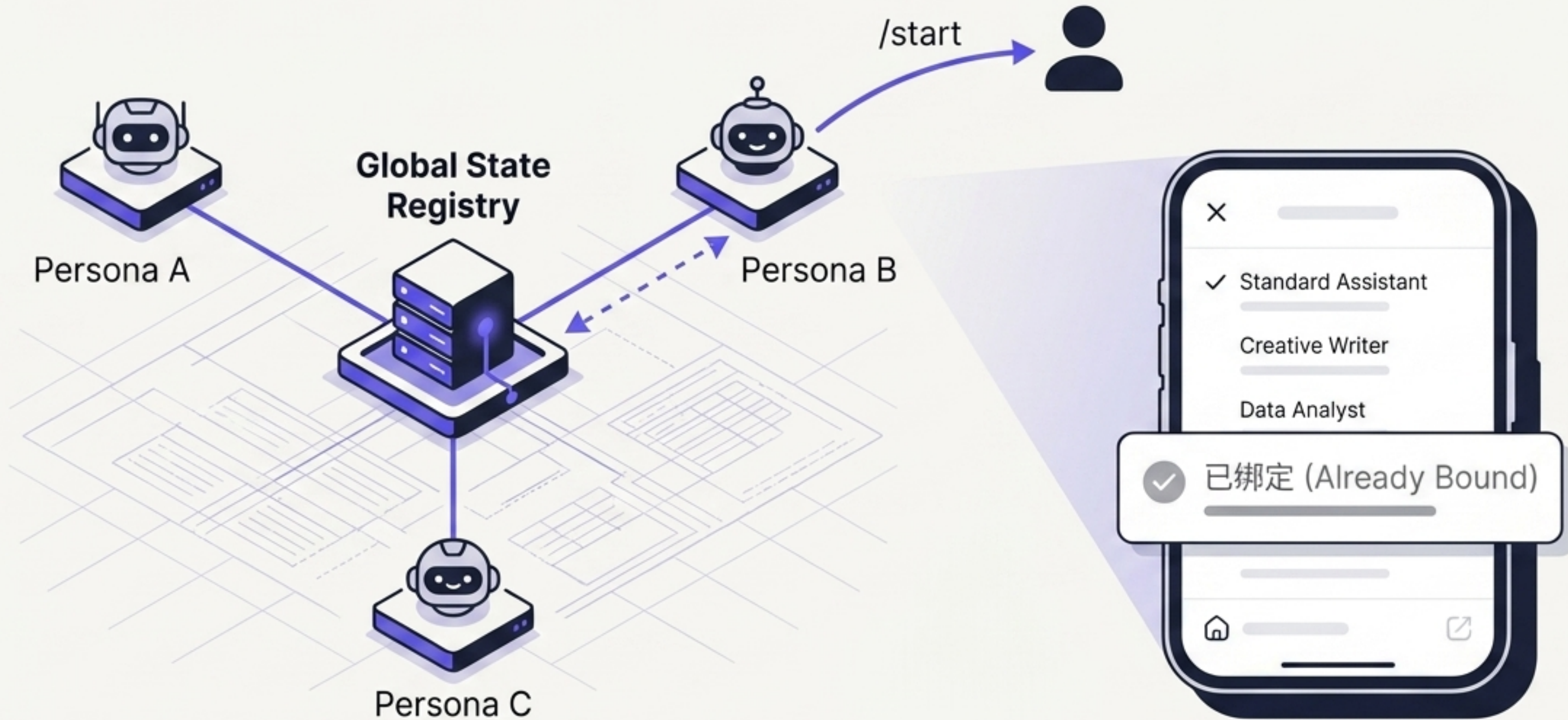
Tokens live in `account_link_tokens`.  
The web app strictly enforces  
`created_at + 15 minutes > now()`.

# Single SQL Resolution



<b>Action:</b>	Linking executes one precise backend update setting <code>users.supabase_user_id</code> on the Telegram row to match the web user's Supabase auth ID.
<b>Guards:</b>	1:1 linking is strictly enforced. Idempotent by design. Reusing a token fails gracefully.

# Cross-Bot Preset Deduplication



v0.1.5 introduces a global state check during **/start** and **/re onboard**.

Presets already bound to the user across ANY bot now render as unselectable, preventing accidental duplicate agents.

# Per-Agent Relationship Modes

Relationship evolution is no longer a global toggle. During **/start**, users now explicitly define the dynamic per-agent.



Telegram Onboarding Flow



**Technical Note:** Replaces the blunt BOT\_RELATIONSHIP\_MODES environment variable with granular, per-agent storage.

# The Presence Imperative: Web vs. Native

	<b>Web Application</b>	<b>Native Application</b>
<b>Notifications</b>	Browser dependent, easily missed	<b>Lock screen push, immediate attention</b>
<b>Accessibility</b>	URL entry, loading spinners, auth checks	<b>Instant launch directly into conversation</b>
<b>State</b>	Network-dependent	<b>Locally cached, instantly available offline</b>

**A web app provides features. A native app provides presence.  
Without instant launch and lock-screen push, a companion is just a website.**

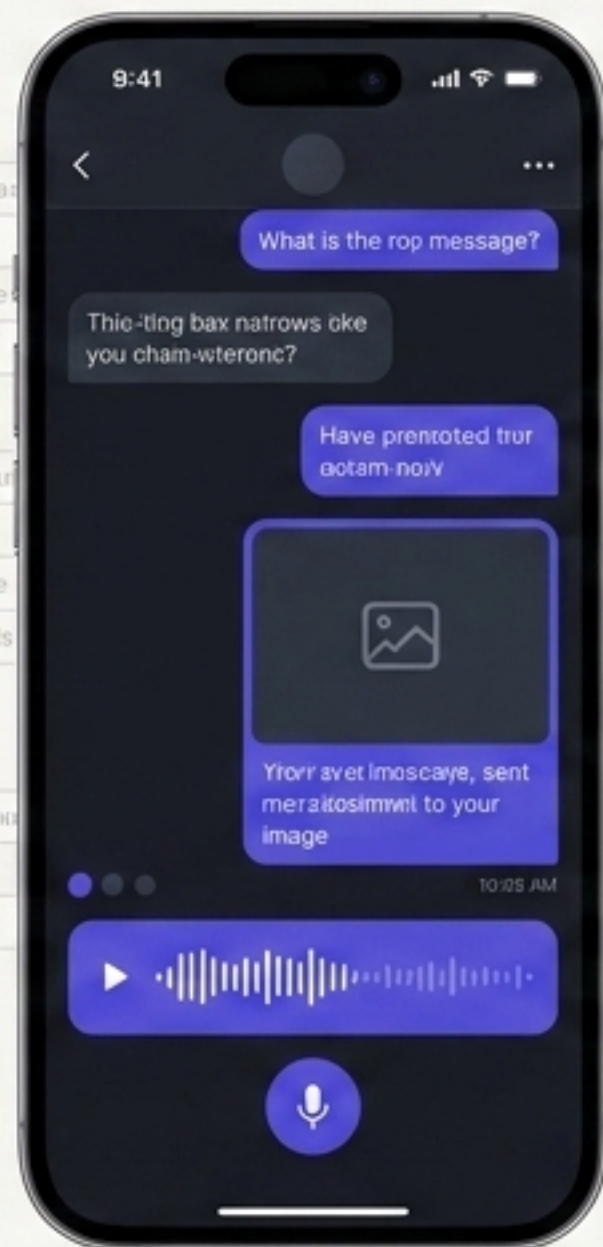
# Native Architecture Deep Dive

## Core Stack

Expo SDK 55 + React Native.  
i18n native support  
(Chinese/English).

## Auth Layer

Supabase integration  
utilizing expo-secure-store.



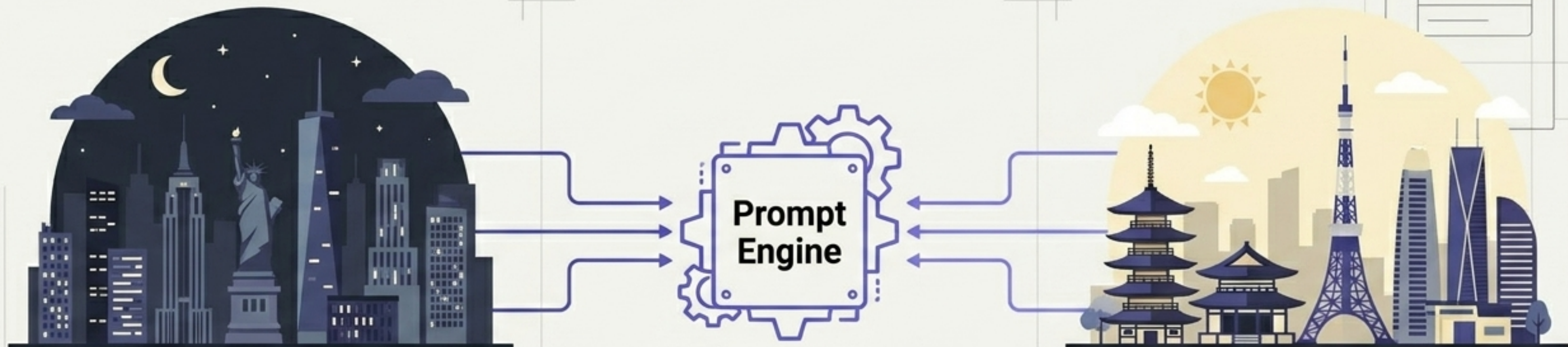
## Media Engine

Fullscreen image viewer,  
video preview and playback.

## Conversational UI

Typing indicators and voice  
recording with real-time  
animated waveforms.

# Dual Timezone Awareness



**New York (Night)**

你那边现在是早上，对方那边是晚上  
(It is morning where you are,  
evening where they are)

**Tokyo (Morning)**

Proactive messaging must understand space and time. The prompt engine now dynamically injects both the user's local time and the persona's configured timezone via persona-config.json. Eliminates the immersion-breaking error of a cheerful good morning sent at the user's midnight.

# Relationship-Aware Tonal Mapping

Relationship Stage	Constraint	Directive
刚认识 (Just Met / Stranger)	Strict Boundaries	禁止撒娇 (No flirty affectation allowed)
↓	↓	↓
情侣 (Partner)	Intimate & Playful	亲密撒娇 (Flirtation and intimacy encouraged)

**Insight:** Prevents the uncanny valley of a newly introduced persona acting like a long-term partner in its first proactive message.

# Schema Evolution

## 1. account\_link\_tokens

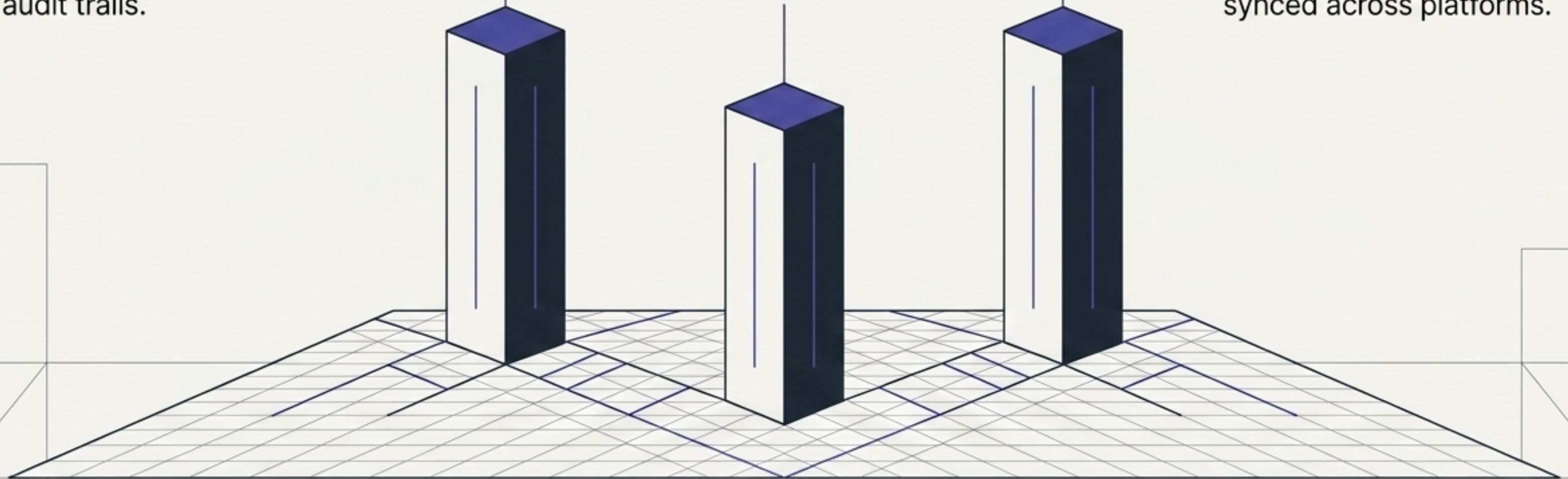
Stores the 6-char token, generating Telegram ID, created\_at, and used\_at for audit trails.

## 2. users.supabase\_user\_id

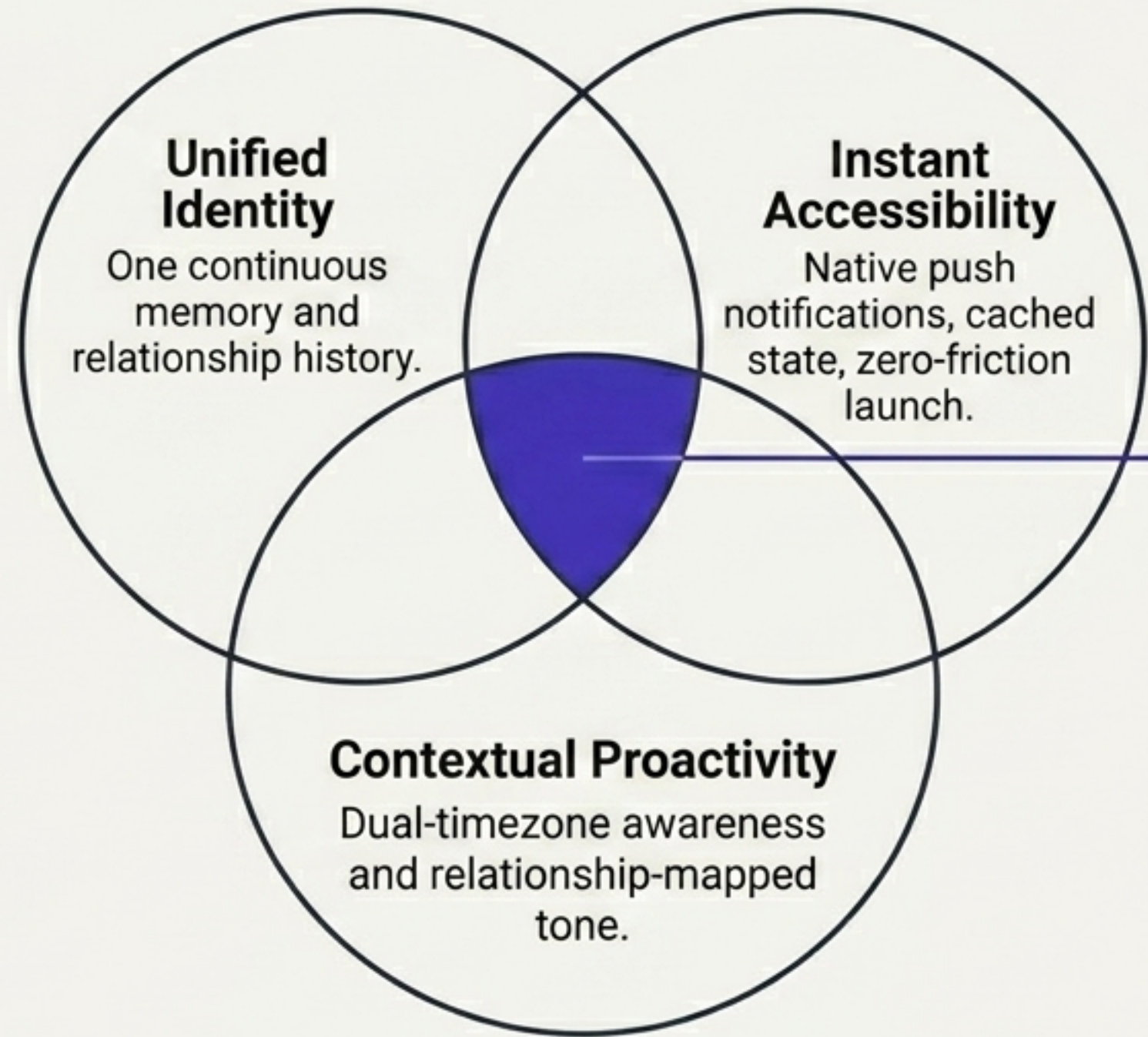
A nullable column permanently linking a Telegram-origin user to their Web identity.

## 3. agents.user\_nickname

The user's specific display name for a given agent relationship, now perfectly synced across platforms.



# The Anatomy of True Presence



**A True Digital Companion**

Summary: v0.1.5 is a holistic leap from a reactive text bot to a persistent, context-aware presence.

# The Foundation for Personalization



With linked identities, per-agent relationship modes, and strict tone mapping locked in place, the architecture is ready for the next phase.

**Next up: Deeper personalization.**  
**Back to the big picture: The Mio Manifesto.**