

Messaging Apps Compared on Privacy: WhatsApp, Signal, Telegram and Arattai

Which messaging app keeps your chats private? End-to-end encryption, backups and metadata in WhatsApp, Signal, Telegram and Arattai, the settings to switch on, and the scams to watch for.

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Free awareness guide. Not legal or financial advice. <https://www.shravyadigital.com/guides/messaging-apps-privacy>

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Before you start

WhatsApp, Signal, Telegram or Arattai: which messaging app actually keeps your chats private? This review compares them on privacy and safety, and shows the settings that matter in whichever app you use. It takes about 12 minutes.

Nobody paid for a place in this review. Facts are correct **as of 17 October 2026**; apps change their features often.

What "end-to-end encrypted" means

End-to-end encryption means only you and the person you're talking to can read your messages. Not the company, not your internet provider, not anyone who intercepts them.

Two other things matter almost as much:

- **Backups.** A chat can be encrypted on the phone and then backed up somewhere it isn't.
- **Metadata.** Even when the company can't read your messages, it may still know *who* you talk to, when and how often.

The rule: Encryption protects your messages from outsiders. It can't protect you from the person you're chatting with, or from a scammer you trust.

The apps side by side

App	Made by	Chats encrypted by default?	Group chats	Backups
WhatsApp	Meta, USA	Yes	Yes	Encrypted only if you turn it on
Signal	Signal Foundation (non-profit), USA	Yes	Yes	Encrypted
Telegram	Telegram, UAE	No: only "Secret Chats"	No	Chats are stored on Telegram's servers
Arattai	Zoho, India	Yes, one-to-one chats (since Nov 2025)	Rolled out Sept 2026	Check in the app

The apps in detail

WhatsApp

The app most Indians already use, and the one fraudsters use most.

- **Good:** messages and calls are end-to-end encrypted by default, using the same protocol as Signal. Strong safety settings: two-step verification, privacy controls, disappearing messages and silencing unknown callers.
- **Watch out:** Meta still collects a lot of metadata: who you contact, when, and your device details. **Chat backups to Google Drive or iCloud are not end-to-end encrypted unless you switch that on** (*Settings → Chats → Chat backup → End-to-end encrypted backup*).

Signal

Run by a non-profit and widely recommended by security experts.

- **Good:** encrypts everything by default, keeps almost no data about you, and its code is open for anyone to inspect. When the authorities have demanded user data, Signal has been able to hand over little more than when an account was created and last connected.
- **Watch out:** fewer people use it, so you may have to persuade friends and family to join.

Telegram

Popular for big groups and channels, not for privacy.

- **Good:** huge groups, public channels, bots and file sharing.
- **Watch out: ordinary Telegram chats and all group chats are not end-to-end encrypted.** Telegram can technically read them, because they are stored on its servers. Only one-to-one "Secret Chats", which you have to start yourself, are end-to-end encrypted. Telegram channels and groups are also heavily used for fake investment tips and job scams.

Arattai

Zoho's Indian messaging app, which grew quickly in late 2025.

- **Good:** built in India, with data stored in India. One-to-one chats became end-to-end encrypted in November 2025, and Zoho's founder announced encryption for group chats in September 2026.
- **Watch out:** it's newer, and its security features are still being added. Update to the latest version, and check the app's own settings for which chats are encrypted.

Which should you choose?

- **For the most privacy:** Signal.
- **For talking to everyone you know:** WhatsApp, with the settings below switched on.
- **If you want an Indian app with data kept in India:** Arattai, on the latest version.
- **For private conversations:** avoid ordinary Telegram chats; use a Secret Chat, or another app.

Many people use more than one: WhatsApp for family groups, and Signal for anything sensitive.

Settings to switch on today

In **WhatsApp** (the others have similar options):

1. **Two-step verification:** *Settings → Account → Two-step verification*. A PIN stops anyone registering your number on a new phone, even if they get your SIM or OTP.
2. **Encrypted backup:** *Settings → Chats → Chat backup → End-to-end encrypted backup*.
3. **Who can add you to groups:** *Settings → Privacy → Groups → My contacts*. This blocks scam groups that add strangers.
4. **Silence unknown callers:** *Settings → Privacy → Calls*.
5. **Check linked devices** regularly: *Settings → Linked devices*. Log out of any you don't recognise.
6. **Never share the six-digit registration code** sent by SMS. Anyone asking for it is taking over your account.

Scams to watch for, in every app

- **"Hi Mum/Dad, this is my new number"** messages asking for money.
- **Fake "customer care"** accounts and links.
- **Stock-tips and "task" job groups** that lead to fake trading apps.
- **Video calls from "police" or "CBI"**: the digital arrest scam.

Our guides to [WhatsApp, SMS & Fake-KYC Fraud](#) and the [digital arrest scam](#) explain these in detail.

Key words

- **End-to-end encryption:** only the sender and receiver can read a message.
- **Metadata:** information about your messages, such as who, when and how often, rather than what they say.
- **Secret Chat:** Telegram's optional end-to-end encrypted one-to-one chat.
- **Two-step verification:** a PIN needed to register your number on a new phone.
- **Linked device:** a computer or tablet connected to your messaging account.

Sources

Checked against these primary sources on 17 October 2026. Rules change: if something here looks out of date, trust the source.

- Telegram FAQ: Secret Chats and cloud chats (<https://telegram.org/faq>)
- WhatsApp Help: end-to-end encrypted backup (<https://faq.whatsapp.com/490592613091019>)
- Signal: what Signal can hand over when subpoenaed (<https://signal.org/bigbrother/>)
- Storyboard18: Arattai rolls out end-to-end encryption for group chats (Sept 2026) (<https://www.storyboard18.com/brand-marketing/arattai-rolls-out-end-to-end-encryption-for-group-chats-sridhar-vembu-ws-l-111403.htm>)
- SFLC.in: Security and privacy feature analysis of messaging apps (<https://sflc.in/security-and-privacy-features-analysis-of-messaging-applications-arattai-whatsapp-signal-prav-and-element/>)