

When WhatsApp went down for four hours this weekend, nearly 5 million people signed up for messaging service Telegram. The app skyrocketed to the top of the App Store charts, and is now the top free app in 46 countries from Germany to Ecuador. In the US and several other countries, the app is no. 1 in the social networking category, ahead of Facebook, WhatsApp, Kik, and others.

It's not immediately clear why Telegram emerged as the alternative of choice following WhatsApp's downtime. Users could have switched to Kik, or Facebook Messenger, or LINE — all of which have hundreds of millions of users. There's seemingly something different about Telegram. Its rise isn't only due to WhatsApp's acquisition and subsequent downtime. "We have been the no. 1 app in Spanish, Arabic, and several Latin American app stores for several weeks before the Facebook deal happened," says Telegram's Markus Ra. "The growth was there — so the WhatsApp acquisition and problems merely multiplied the effect across all affected countries." According to app analytics site App Annie, Telegram started truly gaining steam on February 17th, days before the WhatsApp news even hit.

Built by the pioneering Durov brothers behind Russia's largest social network, VKontakte (also known as VK), Telegram is a messaging service combining the speed of WhatsApp with Snapchat's ephemerality and advanced new security measures. WhatsApp might have heralded the first time we heard of Telegram, but it certainly won't be the last.

Telegram feels in many ways like a straight-up clone of WhatsApp, from its green double-checkmark read receipts to its cartoonish wallpapers. There's also the usual gamut of messaging app features including the ability to see a friend's online status and attach photos, videos, your location, contacts, and documents to messages. But where it lacks originality, Telegram makes up for it in speed and security features. "Telegram is the fastest and most secure mass market messaging system in the world," the company claims, which it attributes in part to Nikolai Durov's open-sourced MTProto protocol. Telegram was in fact built as a testing bed for MTProto, Reuters reported when the app launched back in August. The company is so confident in the security of MTProto that it's offering \$200,000 to anyone who can crack it. It's not unusual for companies to offer bug bounties, but bounties of this size are generally only reserved for critical bugs in widely used apps like Windows.

"The no. 1 reason for me to support and help launch Telegram was to build a means of communication that can't be accessed by the Russian security agencies," Durov told TechCrunch. Durov built in a feature that lets you start a "Secret Chat" with any of your friends. According to Telegram, Secret Chats offer end-to-end encryption, leave no trace on the company's servers, and let you set Snapchat-esque self-destruct timers on messages that range from two seconds to one week. There's also the ability to check the security of your Secret Chats using an image that serves as an encryption key. By comparing your encryption key to a friend's, you can effectively verify that your conversation is secure and less vulnerable to man-in-the-middle attacks, the company says. But despite Telegram's alleged sophistication, no cryptographic method is infallible. The company has, in fact, already doled out \$100,000 to one developer for finding a critical bug, TechCrunch reports.