



# *Competitive Analysis*

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## Key Competitors



### Gab

Gab is an English-language social media website known for its far-right user base. The site has been widely described as a "safe haven" for extremists including neo-Nazis, white supremacists, and the alt-right.



### Twister

Twister is a Twitter-like microblogging platform that utilizes the same blockchain technology as Bitcoin, and the file exchange method from BitTorrent, both based on P2P technologies.



### Rumble

Rumble is a completely off-the-grid application and delay-tolerant micro-blogging application that allows a device to connect, chat and share content (text and images) with other people around you.



### Briar

Briar is a messaging app designed for activists, journalists, and anyone else who needs a safe, easy and robust way to communicate. Messages are synchronized directly between the users' devices, using Tor, or Bluetooth/wifi if internet is down.



### FireChat

FireChat is a free peer-to-peer messaging app that works with or without Internet access or cellular data to send text and images.



### Manyverse

Manyverse is a social network mobile app with features you would expect. But it's not running in the cloud owned by a company, instead, your friends' posts and all your social data live entirely in your phone.

***All apps have the photo feature; none have favorites or follow a topic; some form of microblogging is present in almost all apps, indicating a competitive market***

|                  | Micro-blogging | Direct messaging               | Group messaging | Search/ Hashtag | Save / Favorite | Follow a topic | Follow a user | Retweet / Share | Upvote/ downvote | Photos                         | Comments | Internet/ Offline |
|------------------|----------------|--------------------------------|-----------------|-----------------|-----------------|----------------|---------------|-----------------|------------------|--------------------------------|----------|-------------------|
| <b>Briar</b>     | Blogs + Forum  | Yes (has to add contact first) | Yes             | No              | No              | No             | Yes           | Yes             | No               | Prof pic + emoji, no big image | Yes      | Both              |
| <b>Twister</b>   | Yes            | Yes                            | No              | Search          | No              | No             | Yes           | No              | No               | Profile pic only               | Yes      | Both              |
| <b>Gab</b>       | Yes            | Yes                            | Yes             | Trends          | No              | Unsure         | Yes           | Yes             | Yes              | Yes                            | Yes      | Internet          |
| <b>FireChat</b>  | Messaging app  | Yes                            | Yes (Chatrooms) | Hashtag         | No              | Unsure         | Yes           | No              | No               | Yes                            | No       | Both              |
| <b>Rumble</b>    | Yes            | Yes                            | Yes             | Hashtag         | No              | No             | No            | No              | No               | Yes                            | Yes      | Both              |
| <b>Manyverse</b> | Yes            | No                             | No              | Hashtag         | No              | No             | Yes           | No              | No               | Yes                            | Yes      | Both              |

**What we learned from  
them...**

***On Google Play, FireChat is the overwhelmingly successful, with over 1M installs, far ahead of any other competitors, it also was released the earliest and has enjoyed extensive media coverage***



**FireChat**

First release in April 2014 for Android devices. Has enjoyed coverage from major media, including traditional ones and online blogs. Used in events such as Burning Man, protests in Hong Kong and Taiwan, or during natural disasters.



**Briar**





First release in April 2018. Has appeared in major online blogs such as Medium and Wired



**Manyverse**

Still in beta testing.

# ***Tor has the most complete spreading mechanism, allowing people from China to access the app through multiple methods not blocked by the government***

|   |  |
|---|--|
|    | Google Play; Apk package on its own website  |
|    | Google Play; Apk package on its own website; F-Droid; other third party Android app website      |
|    | Google Play; other third party Android app website   |
|  | Google Play; F-Droid; Apk package on its own website<br>MIRRORS; GETTOR; TO USE GETTOR VIA EMAIL |

## The main approaches

1. APK on its own website,
2. F-droid (not blocked in China, but not sure if it is a well known option)
3. Other third party websites
  - a. apkpure
  - b. aptoid
  - c. Fossdroid
  - d. others
4. Email

# *Funding*



**GRANTS**



**CROWDFUNDING**



**AFFILIATE  
MARKETING**



**U.S.  
GOVERNMENT**

## ***Case Study - Briar: comprehensive features is important for users***

### **What is Briar?**

Briar is a messaging app designed for activists, journalists, and anyone else who needs a safe, easy and robust way to communicate. Unlike traditional messaging tools such as email, Twitter or Telegram, Briar doesn't rely on a central server - messages are synchronized directly between the users' devices.

If the internet's down, Briar can sync via Bluetooth or Wi-Fi. If the internet's up, Briar can sync via the Tor network, protecting users and their relationships from surveillance.

### **Features**

Comprehensive ways of interacting with the community:  
**Direct messaging, Group messaging, Forum, Blog, RSS Feed**

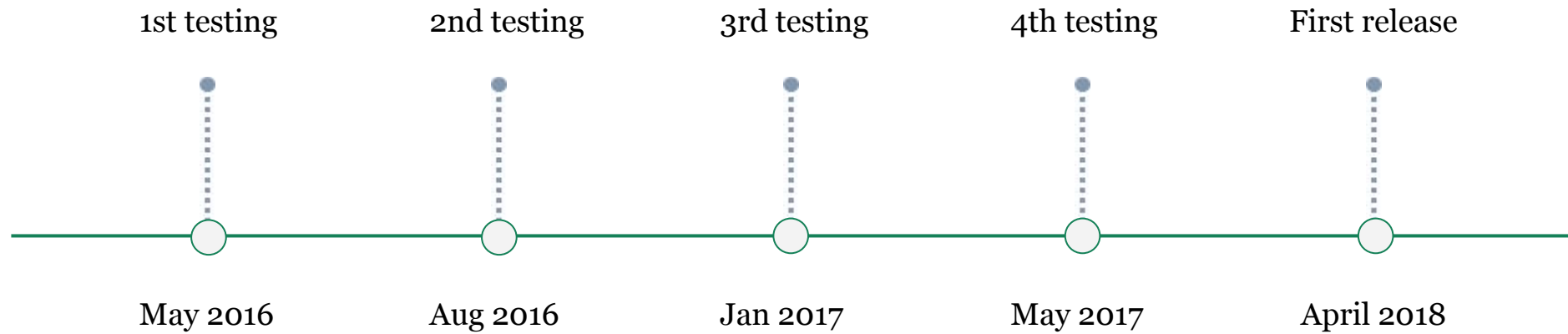
### **Extra support in China**

**Supports Tor with VPN in China and Iran; supports Tor without VPN in China**





## ***Case Study - Briar: creating new features catering to the needs of users based on user testings***



# Case Study - Briar: maintaining an online exposure is important, blogs and social media

W I F I D

Out in the Open: Take Back Your Privacy With This Open Source WhatsApp

SHARE

Out in the Open: Take Back Your Privacy With This Open Source WhatsApp

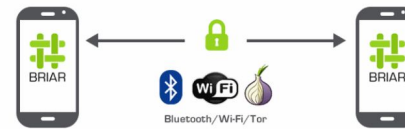
ILLUSTRATION: COURTESY OF BRIAR

2014

## Briar Tor-Based Messenger Passes Security Audit, Enters Beta Stage

By Catalin Cimpanu

July 21, 2017 02:00 PM 2



2017

## Briar: Advantages, Cons, Dangers

By Darren Kittle Follow Oct 2 - 6 min read



2019

## Expert review: Briar, a P2P messaging app

By Gus Andrews Follow Sep 4, 2015 - 8 min read



Activity: User testing and expert heuristic review on a peer-to-peer mobile messaging app.

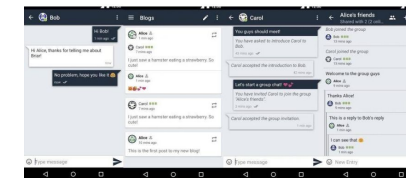
Takeaway: In order to make effective use of an app, users need to know what the app is doing. Make system status visible.

Researchers who want to evaluate software interfaces have a number of tools at their disposal. One option for

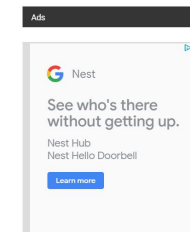


## Briar offers a more secure P2P messaging anytime, anywhere

By Rai Padilla May 11, 2018



People want a more secure messaging service or channel all the time but to be honest, it is sometimes impossible. Even with all the privacy and security measures, some genius hackers can still get inside a system. Google is serious about fighting such problem but it





## ***Case study - FireChat:***

Conduct a quick case study of FireChat; looking at key information such as when they started, how did alpha testing and beta testing go, how long testings took. how they approached the market how to reach 1M downloads??

Feedback from customers??

Briar is designed to resist surveillance and censorship by an adversary with the following capabilities:

- All long-range communication channels (internet, phone network, etc) are comprehensively monitored by the adversary.
- The adversary can block, delay, replay and modify traffic on long-range communication channels.
- The adversary has a limited ability to monitor short-range communication channels (Bluetooth, WiFi, etc).
- The adversary has a limited ability to block, delay, replay and modify traffic on short-range communication channels.
- The adversary can deploy a n unlimited number of devices running Briar.
- There are some users who can keep their devices secure - those who can't are considered, for the purposes of the threat model, to be controlled by the adversary.
- The adversary has a limited ability to persuade users to trust the adversary's agents - thus the number of social connections between the adversary's agents and the rest of the network is limited.
- The adversary can't break standard cryptographic primitives.

# FireChat

FireChat is a free peer-to-peer messaging app that works with or without Internet access or cellular data to send text and images.

Features:

- Instantly post messages and photos
- Send private messages with end-to-end encryption
- Create private groups up to 50 people
- Use hashtags to create public chat rooms
- Block users

Target audience: Not specific to one region

FireChat has been utilized by community organizers, emergency responders and private citizens to communicate when cut off from outside networks, including pro-democracy protests in Taiwan and Hong Kong, natural disasters in Ecuador and Kashmir, and off-the-grid events like Burning Man and Summit at Sea.



# Tor

Tor is free and open-source software for enabling anonymous communication. The name is derived from an acronym for the original software project name "The Onion Router".

Features:

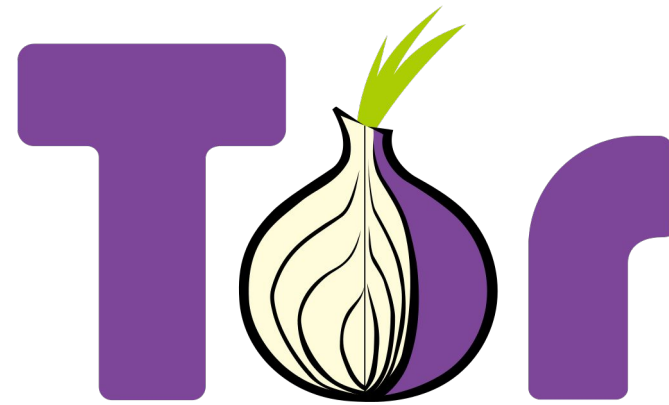
- Blocks trackers by isolating websites
- Prevents surveillance
- Resists fingerprinting
- Multi-layered encryption

Target audience: U.S.

Written primarily in C, but also Python, JS, etc

Users are able to download Tor from their website

Received funding from: Electronic Frontier Foundation, U.S. International Broadcasting Bureau, Internews, Human Rights Watch, the University of Cambridge, Google, Stichting NLnet, and the US Government



## ***Source***

*For details, refer to...*

**<https://docs.google.com/spreadsheets/d/1DUFICOGZWfxuGoP12RmLH-wjka22tn5gBlTU2CQSh6M/edit#gid=0>**