



qTox

Building the better Skype

sudden6 at ToxCon 2018 12.-14.10.2018



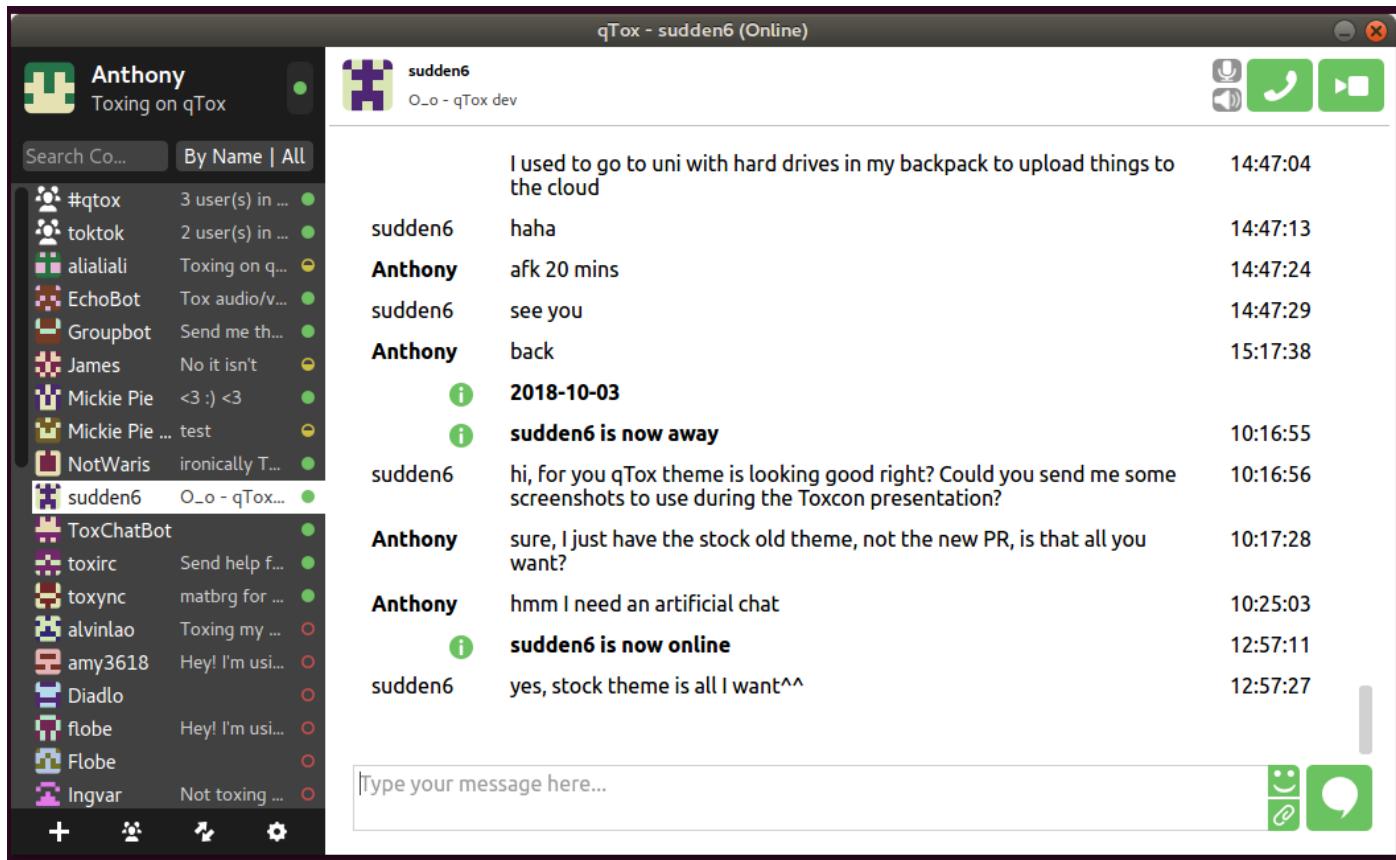
Overview

- About qTox
- Motivation
- Current State
- Challenges
- Future Projects



What is qTox?

- (Best) Tox client for
 - Chat
 - Audio
 - Video
 - File-transfer
- Easy to use
- Multiplatform
 - Linux
 - Windows
 - Mac
 - FreeBSD



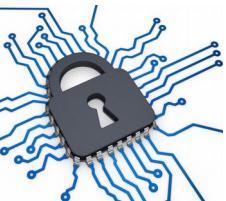
Why is qTox better than Skype

- Distributed
 - No single point of failure
 - No single point to get data
 - No single point to censor
- Fully Open Source → Auditable



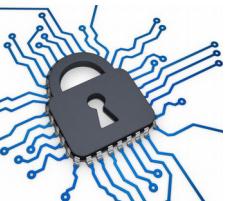
Focus

- User friendliness
- Security
- Desktop platforms



Focus: User friendliness

- Common icons instead of text
- Sensible default settings
- Flexible customization
- Stability
- Intuitive and pleasant UI



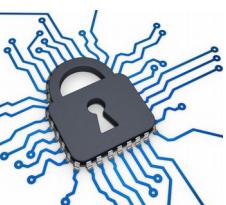
Focus: Security

- Ask for a password by default
- Settings and history encrypted
- Disable history if wanted
- Disable typing notification if wanted



Focus: Desktop platforms

- Desktop PC for „Getting work done“
- Linux, Windows, Mac, FreeBSD
- Shared code base for all platforms
- Excell at one form factor instead of a mediocre implementation on many



Advantages

- Spell checking
- Emoji support
- Full text search in chats
- Contact grouping in Circles
- Multiple window mode

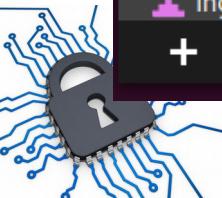


Impressions: Chat

The screenshot shows a qTox chat window titled "qTox - sudden6 (Online)". The left sidebar lists various contacts with their status (e.g., Toxing on qTox, Online). The main chat area shows a conversation between "sudden6" and "Anthony".

Time	User	Message
14:47:04	sudden6	I used to go to uni with hard drives in my backpack to upload things to the cloud
14:47:13	sudden6	haha
14:47:24	Anthony	afk 20 mins
14:47:29	sudden6	see you
15:17:38	Anthony	back
	i 2018-10-03	
	i sudden6 is now away	10:16:55
10:16:56	sudden6	hi, for you qTox theme is looking good right? Could you send me some screenshots to use during the Toxcon presentation?
10:17:28	Anthony	sure, I just have the stock old theme, not the new PR, is that all you want?
10:25:03	Anthony	hmm I need an artificial chat
12:57:11	i sudden6 is now online	
12:57:27	sudden6	yes, stock theme is all I want^^

At the bottom, there is a message input field with placeholder text "Type your message here..." and a toolbar with icons for smiley face, eye, and speech bubble.

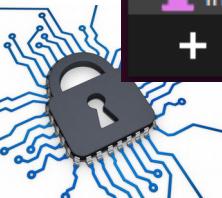


Impressions: Search

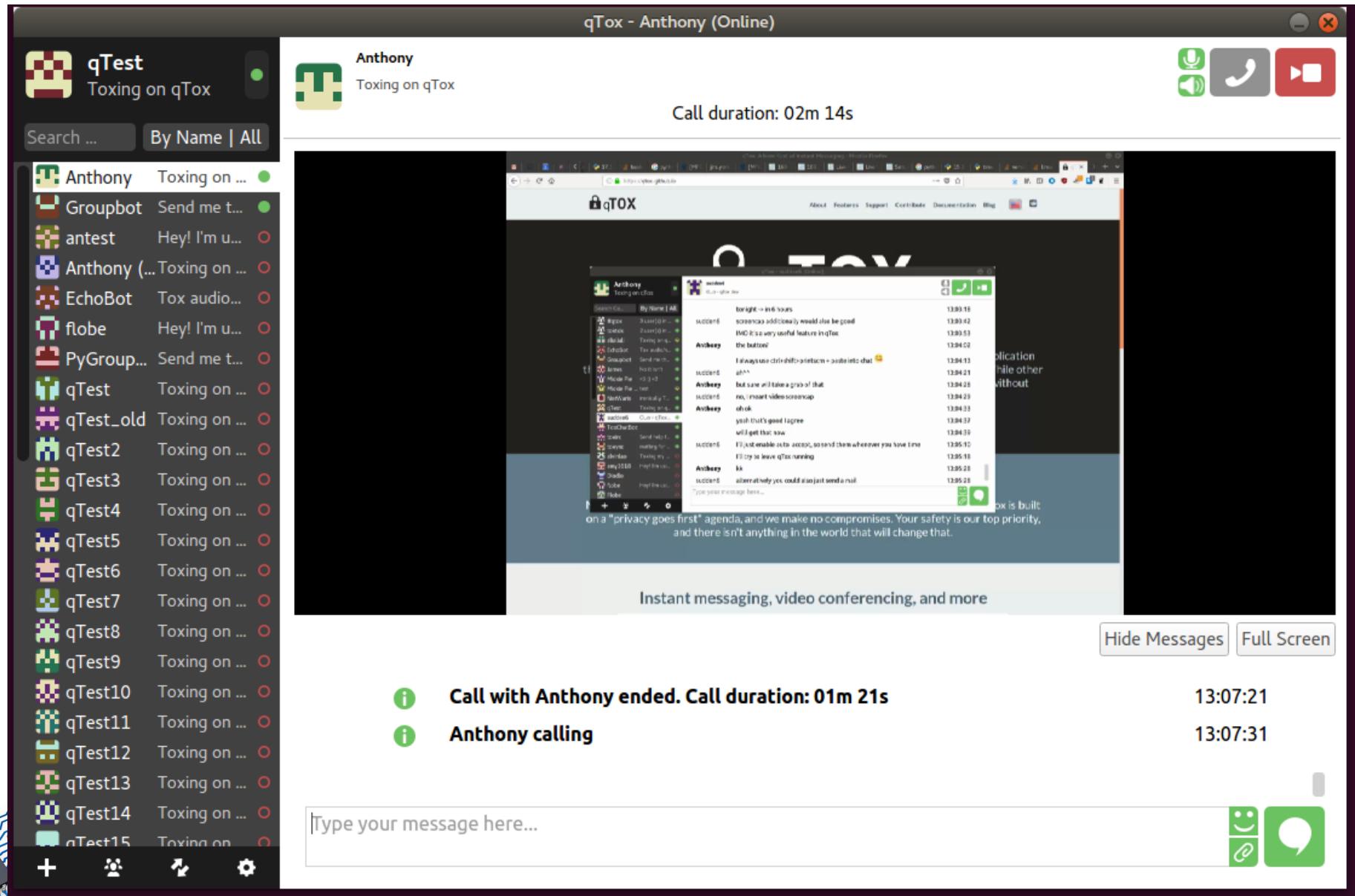
The screenshot shows the qTox application interface. At the top, it displays two contacts: "Anthony" (Toxing on qTox) and "sudden6" (O_o - qTox dev). The main window features a search bar with the query "searching.*history" and options to start the search "from the end". Below the search bar are checkboxes for "Case sensitive", "Whole words only", and "Use regular expressions", with "Use regular expressions" being selected. The main area shows a list of messages from the "sudden6" contact. One message is highlighted with a green background, showing a screenshot of the qTox interface with the search results. The messages are:

- sudden6: you ok with me sharing that during the presentation? 13:00:07
- sudden6: contains your contact list? 13:00:19
- Anthony: yeah seems fine 13:00:44
- sudden6: could you also maybe make a screenshot of you searching in the chat history? 13:01:06
- sudden6: and if possible one with video chat running? 13:01:18
- (maybe just draw some smiley face on a paper and call echobot xD) 13:01:39

At the bottom, there is a message input field with placeholder text "Type your message here..." and a row of icons for file attachments, a lock, and other functions.



Impressions: Video Calls



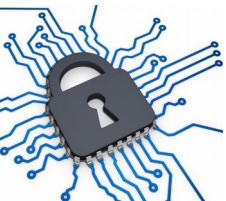
Technologies

- Qt
- C++11
- Toktok/c-toxcore
- ffmpeg
- OpenAL
- SQLite/SQLCipher



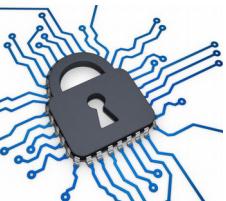
Challenges

- All features on all platforms is hard
- Everybody wants features, no one wants tests
 - Developers as well as users
- More people who write code than who review
- Consistent UI/UX design
- Echo cancelling



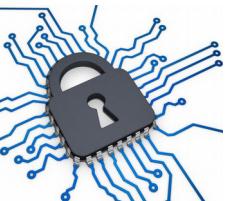
Challenges

- Building for all platforms
- Packaging on Linux
- Getting your package in a distribution
- Dependencies



New and planned Features

- Desktop notifications
 - Linux done, infrastructure not updated
- Support for persistent group chats
 - Once implemented in c-toxcore
- Push to talk via global hotkeys



Developer projects

- Clean up the Code
 - Separate UI and logic
 - Make the abstractions for c-toxcore standalone
 - Make Audio and Video backends standalone
- Reproducible builds
 - Started, needs infrastructure



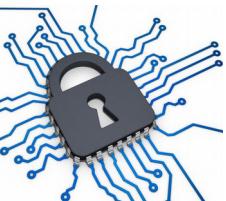
Developer projects

- Support different themes
 - Better integration with KDE and GNOME provided themes
 - Supply own theme for Windows and MacOS



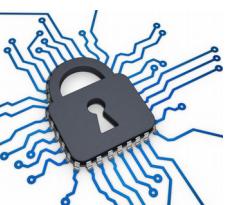
Designer Projects

- qTox could use a cleanup of various design issues
 - Non-resizeable text entry for chat forms
 - Layout of messages in chats not optimal
 - HiDPI improvements
- Dark theme
- Nice emoji picker



Where to get?

- Github: <https://github.com/qTox/qTox>
- Flathub:
[https://flathub.org/apps/details/
io.github.qtox.qTox](https://flathub.org/apps/details/io.github.qtox.qTox)
- Tox.chat: <https://tox.chat/download.html>
- Official OpenSUSE repository



How to get right now?

- `git clone https://github.com/qTox/qTox`
- `cd ./qTox`
- `./simple_make.sh`

