

## 1 Screenshot and Download



Ubuntu GNU/Linux.

### 1.1 Minimum requirements

Built using Qt library, ZeroMQ, and libuuid.

## 1.2 Build environment

Package	Version
Qt	6.2.0
ZeroMQ	4.3.4 (stable)

## 1.3 Startup message

The program will output some version information when it starts.

```
Compiled with Qt Version 6.2.0
Using Qt Version 6.2.0
Using libzmq 4.3.4
Creating ReceiveBroadcast thread for ZeroMQ stream.
```

## 2 Dependencies

## 3 Firewall

Outgoing TCP connections are made to an application protocol service (one of port 5780 through 5782) and also a game broadcast service (port 5558), all for ZeroMQ data.

## 4 Notes

Encryption is not enabled in this application.

## 5 Stats

See also the **Stats** html — pdf page, to see the uptime of the services, in seconds. The page is updated every hour.

## 6 License

GPLv3

## 7 Usage

Start by having both players open the application on their own computers, and with the first application click **Generate Game** to create a new Game UUID on the server. The second application will be able to track the generated game.

Then if you would like to play X as the first player, click on **Seat First**. The other player selects **Seat Second**. Finally, as the first player you can press **Begin Game**.

Any move you play from then on will be sent to both clients.

When the game comes to an end, a Game Over indication will appear and you can click **Generate Game** to start again.

## 7.1 Ubuntu GNU/Linux

Run `./tictacqt`

## 7.2 Configuration files

On each computer, a `~/.config/tictacqt/user_uuid.txt` file is generated the first time the program is run. This UUID is used on subsequent invocations of the application.

# 8 Two instances on one computer

It is also possible to run the program twice on the same computer. You just need to specify a custom UUID for the second instance.

It is suggested to open two terminal windows, one for each instance. We'll start by talking about the second instance.

Begin by running `./tictact UUID` which should show output such as the following:

```
61a03cd0-d69c-4f4a-a00a-e13499397a60
```

The second instance needs the generated UUID specified as the initial argument. When the program loads it will tell you that it is using a custom UUID.

The first instance is then just run as `./tictacqt`

## 8.1 Future versions

An optimization is planned in future versions to use the server **SendMsg** call, which will use a frontend server to send messages between players. Currently the game play traffic does one additional round trip to the backend server.

## 9 Keyboard shortcuts

% Esc - Quit program