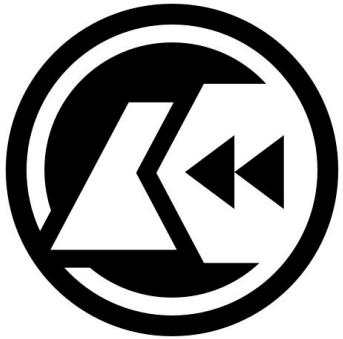
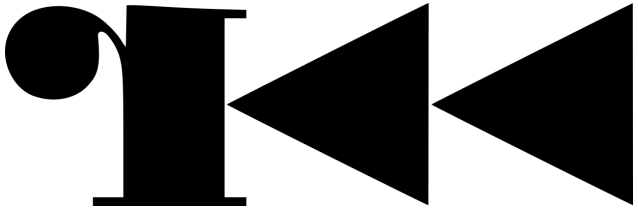


Cutter

A graphical user interface for radare2 - by Antide Petit

whoami

@xarkes_

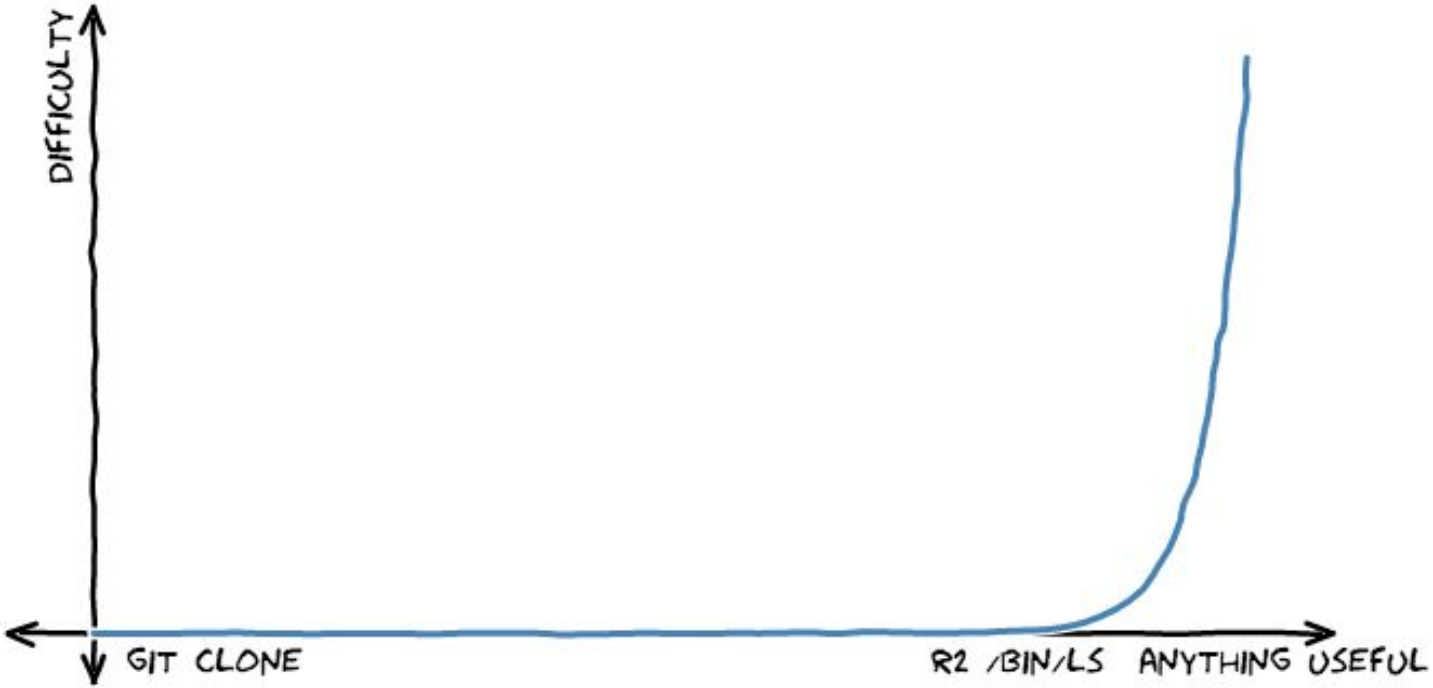


Origins of Cutter

- Iaito
- Qt/C++
- Developed for a while by only one person (Hugo Teso)
- Took a few years to become open source
- After it became open source, no more maintenance

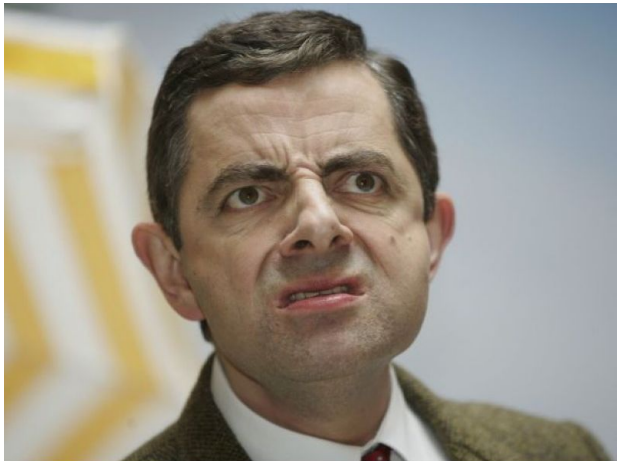
“Cutter is not aimed at existing radare2 users. It instead focuses on those whose are not yet radare2 users because of the learning curve, because they don't like CLI applications or because of the difficulty/instability of radare2.”

R2 LEARNING CURVE



Old code...

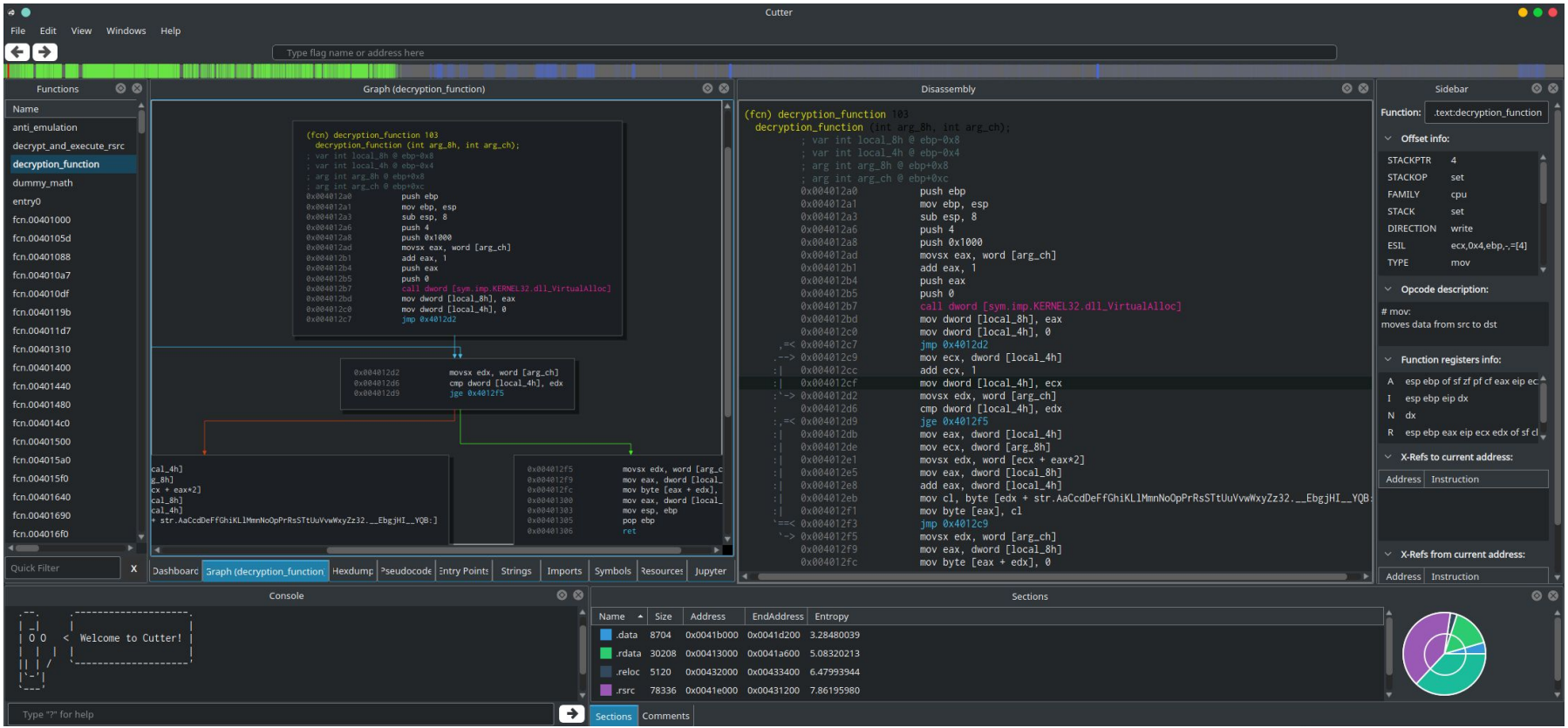
- Many useless or unusable features (from a Reverse Engineer point of view)
- Displayed graphs with HTML (Qt WebEngine)



… to better code

- Big refactoring
- Removed HTML graphs
- Added a lot of new features

What is it like?



Features

- Basic reverse engineering widgets
  - Disassembly
  - Graph
  - Hexdump
  - Sections/Functions/Strings

Features

- Analysis options
- Jupyter notebook (python scripting)

Demo

Internal structure

- (Almost) Everything is a QDockWidget
  - Can be moved around
  - Can be docked
  - Can be windowed
  - => Very flexible
- (Almost) Everything uses radare2 json output
  - The commands are more stable than the current API
  - Json is easy to parse

Projects (TODO)

- Move reverse widgets to an external library
  - Will help maintenance with x64dbg
  - Will give the possibility for anyone to use the existing rather than reinventing the wheel
- Collaborative platform (dependant on r2)

Projects (WIP)

- Python plugins
- Plugin manager
- More asynchronous tasks
- Debugger support

GSoC

- **@filipe_casal**
- Debugging platform

Google
Summer of Code

How to get it?

- Releases are published on GitHub
- **https://github.com/radareorg/cutter/releases**

Documentation?

- Contribution guidelines are available in the repo
- No complete documentation (the software moves fast)
- Feel free to ask help on IRC or Telegram (#cutter on Freenode)

Can I use it?

- Some people use it (already) in their daily job
- Follow **@megabeets_** tutorials

Conclusion

- A lot of improvements in a year
- A lot of remaining work
- Is used in real world reverse engineering

Thank you!

@radareorg
@r2gui

https://github.com/radareorg/cutter