

Do profilowania klienta poliqarpc użyliśmy narzędzi rubypf oraz pprof.rb następującego kodu:

```
#vim:encoding=utf-8

require File.join(File.dirname(__FILE__), '..', 'lib', 'poliqarpr')

LIMIT = ARGV[0].to_i
@client = Poliqarp::Client.new("TEST")
@client.open_corpus(:default)

(0..LIMIT).each do
  @result = @client.find("kita")
end
@client.close
```

Wynik dla 10000 zapytań zwrócony przez rubypf:

%self	total	self	wait	child	calls	name
48.84	0.34	0.21	0.00	0.13	10001	Poliqarp::Client#find_many
9.30	0.06	0.04	0.00	0.02	10001	Poliqarp::Client#count_results
9.30	0.04	0.04	0.00	0.00	10001	Poliqarp::QueryResult#initialize
9.30	0.38	0.04	0.00	0.34	10001	Poliqarp::Client#find
6.98	0.41	0.03	0.00	0.38	1	Range#each
4.65	0.08	0.02	0.00	0.06	10004	Class#new
2.33	0.01	0.01	0.00	0.00	10007	<Class::BasicObject>#allocate
2.33	0.01	0.01	0.00	0.00	10004	String#to_i
2.33	0.01	0.01	0.00	0.00	9	Kernel#require(d1)
2.33	0.01	0.01	0.00	0.00	1	TCPsocket#initialize
2.33	0.01	0.01	0.00	0.00	10012	String#split
0.00	0.00	0.00	0.00	0.00	30011	Hash#default
0.00	0.00	0.00	0.00	0.00	2	Exception#exception
0.00	0.00	0.00	0.00	0.00	2	Kernel#raise
0.00	0.00	0.00	0.00	0.00	2	Exception#initialize
0.00	0.00	0.00	0.00	0.00	2	MatchData#[[]]
0.00	0.00	0.00	0.00	0.00	2	Regexp#match
0.00	0.00	0.00	0.00	0.00	2	String#match
0.00	0.00	0.00	0.00	0.00	2	Kernel#loop
0.00	0.00	0.00	0.00	0.00	2	Poliqarp::Client#do_wait
0.00	0.00	0.00	0.00	0.00	2	Kernel#lambda
0.00	0.00	0.00	0.00	0.00	1	String#==
0.00	0.00	0.00	0.00	0.00	1	Poliqarp::Client#open_corpus(d1)
0.00	0.00	0.00	0.00	0.00	1	Poliqarp::Client#open_corpus
0.00	0.00	0.00	0.00	0.00	1	Poliqarp::Client#lemmata=
0.00	0.00	0.00	0.00	0.00	2	Exception#backtrace
0.00	0.00	0.00	0.00	0.00	2	Hash#==
0.00	0.00	0.00	0.00	0.00	1	Poliqarp::Client#tags=
0.00	0.00	0.00	0.00	0.00	2	Fixnum#to_s
0.00	0.00	0.00	0.00	0.00	1	Poliqarp::Client#buffer_resize

0.00	0.00	0.00	0.00	0.00	12 Array#shift
0.00	0.00	0.00	0.00	0.00	10 Mutex#sleep
0.00	0.00	0.00	0.00	0.00	10 Array#push
0.00	0.00	0.00	0.00	0.00	10 <Class::Thread>#current
0.00	0.00	0.00	0.00	0.00	22 Array#empty?
0.00	0.00	0.00	0.00	0.00	12 Queue#pop
0.00	0.00	0.00	0.00	0.00	10 Poliqarp::Connector#read_message
0.00	0.00	0.00	0.00	0.00	11 Symbol#==
0.00	0.00	0.00	0.00	0.00	10 String#encode
0.00	0.00	0.00	0.00	0.00	10 Float#>=
0.00	0.00	0.00	0.00	0.00	10 String#to_f
0.00	0.00	0.00	0.00	0.00	10 Array#join
0.00	0.00	0.00	0.00	0.00	2 Exception#set_backtrace
0.00	0.00	0.00	0.00	0.00	10 Poliqarp::Ruby19#ruby19?
0.00	0.00	0.00	0.00	0.00	42 IO#write
0.00	0.00	0.00	0.00	0.00	21 IO#puts
0.00	0.00	0.00	0.00	0.00	11 Kernel#puts
0.00	0.00	0.00	0.00	0.00	10 Symbol#to_s
0.00	0.00	0.00	0.00	0.00	10 Poliqarp::Connector#send
0.00	0.00	0.00	0.00	0.00	10 Poliqarp::Client#talk
0.00	0.00	0.00	0.00	0.00	1 Thread#initialize
0.00	0.00	0.00	0.00	0.00	1 <Class::Thread>#new
0.00	0.00	0.00	0.00	0.00	1 Poliqarp::Connector#main_loop
0.00	0.00	0.00	0.00	0.00	25 Mutex#unlock
0.00	0.00	0.00	0.00	0.00	2 Module#===
0.00	0.00	0.00	0.00	0.00	1 <Class::IO>#allocate
0.00	0.01	0.00	0.00	0.01	1 <Class::IO>#new
0.00	0.00	0.00	0.00	0.00	4 NilClass#nil?
0.00	0.00	0.00	0.00	0.00	25 Mutex#lock
0.00	0.01	0.00	0.00	0.01	25 Mutex#synchronize
0.00	0.01	0.00	0.00	0.01	1 Poliqarp::Connector#open
0.00	0.01	0.00	0.00	0.01	1 Poliqarp::Client#new_session
0.00	0.00	0.00	0.00	0.00	4 Mutex#initialize
0.00	0.00	0.00	0.00	0.00	4 <Class::Mutex>#allocate
0.00	0.00	0.00	0.00	0.00	1 Class#new(d3)
0.00	0.00	0.00	0.00	0.00	6 Kernel#taint
0.00	0.00	0.00	0.00	0.00	2 Queue#initialize
0.00	0.00	0.00	0.00	0.00	4 Class#new(d2)
0.00	0.00	0.00	0.00	0.00	1 Poliqarp::Connector#initialize
0.00	0.00	0.00	0.00	0.00	2 Class#new(d1)
0.00	0.01	0.00	0.00	0.01	1 Poliqarp::Client#initialize
0.00	0.00	0.00	0.00	0.00	10001 Poliqarp::Client#make_query
0.00	0.00	0.00	0.00	0.00	1 BasicObject#!=
0.00	0.00	0.00	0.00	0.00	1 BasicObject#==
0.00	0.00	0.00	0.00	0.00	11 Array#[]
0.00	0.00	0.00	0.00	0.00	1 Hash#default=
0.00	0.00	0.00	0.00	0.00	3 Kernel#require(d2)
0.00	0.00	0.00	0.00	0.00	2 Module#private
0.00	0.00	0.00	0.00	0.00	23 BasicObject#singleton_method_added

0.00	0.00	0.00	0.00	0.00	2	Module#attr_writer
0.00	0.00	0.00	0.00	0.00	1	Array#each(d1)
0.00	0.00	0.00	0.00	0.00	2	Module#attr_accessor
0.00	0.00	0.00	0.00	0.00	2	Module#included
0.00	0.00	0.00	0.00	0.00	2	Module#append_features
0.00	0.00	0.00	0.00	0.00	2	Module#include
0.00	0.00	0.00	0.00	0.00	2	Module#protected
0.00	0.00	0.00	0.00	0.00	10	Module#define_method
0.00	0.00	0.00	0.00	0.00	1	Hash#each
0.00	0.00	0.00	0.00	0.00	2	Module#attr_reader
0.00	0.00	0.00	0.00	0.00	16	Class#inherited
0.00	0.00	0.00	0.00	0.00	151	Module#method_added
0.00	0.00	0.00	0.00	0.00	5	<Class::Range>#allocate
0.00	0.01	0.00	0.00	0.01	3	Array#each
0.00	0.00	0.00	0.00	0.00	1	<Class::Dir>#glob
0.00	0.00	0.00	0.00	0.00	1	Array#unshift
0.00	0.00	0.00	0.00	0.00	1	Poliqarp::Client#close
0.00	0.01	0.00	0.00	0.01	1	Kernel#require
0.00	0.00	0.00	0.00	0.00	4	<Class::File>#join
0.00	0.00	0.00	0.00	0.00	5	<Class::File>#dirname
0.00	0.00	0.00	0.00	0.00	22	IO#set_encoding
0.00	0.43	0.00	0.00	0.43	1	Kernel#load
0.00	0.43	0.00	0.00	0.43	2	Global#[No method]

Thread ID: 72589370

Total: 0.410000

%self	total	self	wait	child	calls	name
0.00	0.00	0.00	0.00	0.00	2	Thread#initialize
0.00	0.00	0.00	0.00	0.00	2	<Class::Thread>#new
0.00	0.00	0.00	0.00	0.00	2	Poliqarp::Connector#receive_async
0.00	0.00	0.00	0.00	0.00	10	Thread#run
0.00	0.00	0.00	0.00	0.00	10	Mutex#unlock
0.00	0.00	0.00	0.00	0.00	10	Thread#wakeup
0.00	0.00	0.00	0.00	0.00	10	Array#shift
0.00	0.00	0.00	0.00	0.00	10	Array#push
0.00	0.00	0.00	0.00	0.00	10	Mutex#lock
0.00	0.00	0.00	0.00	0.00	10	Mutex#synchronize
0.00	0.00	0.00	0.00	0.00	10	Queue#push
0.00	0.00	0.00	0.00	0.00	24	IO#write
0.00	0.00	0.00	0.00	0.00	12	IO#puts
0.00	0.00	0.00	0.00	0.00	12	Kernel#puts
0.00	0.00	0.00	0.00	0.00	10	Poliqarp::Connector#receive_sync
0.00	0.00	0.00	0.00	0.00	12	String#[]
0.00	0.00	0.00	0.00	0.00	12	String#force_encoding
0.00	0.00	0.00	0.00	0.00	12	Float#>=
0.00	0.00	0.00	0.00	0.00	12	String#to_f
0.00	0.00	0.00	0.00	0.00	12	Array#join

0.00	0.00	0.00	0.00	0.00	12	Array#[]
0.00	0.00	0.00	0.00	0.00	12	String#split
0.00	0.00	0.00	0.00	0.00	12	Poliqarp::Ruby19#ruby19?
0.00	0.41	0.00	0.41	0.00	84	IPSocket#recvfrom
0.00	0.41	0.00	0.00	0.41	12	Poliqarp::Connector#read_line
0.00	0.41	0.00	0.00	0.41	12	Poliqarp::Connector#receive
0.00	0.41	0.00	0.00	0.41	1	Kernel#loop
0.00	0.41	0.00	0.00	0.41	1	Poliqarp::Connector#main_loop

Thread ID: 72869776

Total: 0.410000

%self	total	self	wait	child	calls	name
0.00	0.00	0.00	0.00	0.00	1	Mutex#unlock
0.00	0.00	0.00	0.00	0.00	1	Array#shift
0.00	0.00	0.00	0.00	0.00	1	Array#push
0.00	0.00	0.00	0.00	0.00	1	Mutex#lock
0.00	0.00	0.00	0.00	0.00	1	Mutex#synchronize
0.00	0.00	0.00	0.00	0.00	1	Queue#push
0.00	0.00	0.00	0.00	0.00	1	Proc#call
0.00	0.41	0.00	0.41	0.00	1	Poliqarp::Connector#receive_async

Thread ID: 72866402

Total: 0.410000

%self	total	self	wait	child	calls	name
0.00	0.00	0.00	0.00	0.00	1	Mutex#unlock
0.00	0.00	0.00	0.00	0.00	1	Array#shift
0.00	0.00	0.00	0.00	0.00	1	Array#push
0.00	0.00	0.00	0.00	0.00	1	Mutex#lock
0.00	0.00	0.00	0.00	0.00	1	Mutex#synchronize
0.00	0.00	0.00	0.00	0.00	1	Queue#push
0.00	0.00	0.00	0.00	0.00	1	Proc#call
0.00	0.41	0.00	0.41	0.00	1	Poliqarp::Connector#receive_async

Oraz wyniki zwrócone przez pprof

Total: 7 samples

3	42.9%	42.9%	3	42.9%	garbage_collector
1	14.3%	57.1%	2	28.6%	Poliqarp::Client#count_results
1	14.3%	71.4%	1	14.3%	Poliqarp::Connector#read_message
1	14.3%	85.7%	3	42.9%	Range#each
1	14.3%	100.0%	1	14.3%	String#split
0	0.0%	100.0%	1	14.3%	Class#new
0	0.0%	100.0%	2	28.6%	Hash#default
0	0.0%	100.0%	1	14.3%	IO#write
0	0.0%	100.0%	3	42.9%	Kernel#loop

0	0.0%	100.0%	1	14.3%	Mutex#lock
0	0.0%	100.0%	1	14.3%	NilClass#nil?
0	0.0%	100.0%	1	14.3%	Poliquarp::Client#do_wait
0	0.0%	100.0%	2	28.6%	Poliquarp::Client#find
0	0.0%	100.0%	2	28.6%	Poliquarp::Client#find_many
0	0.0%	100.0%	1	14.3%	Poliquarp::Client#open_corpus
0	0.0%	100.0%	1	14.3%	Poliquarp::Client#talk
0	0.0%	100.0%	1	14.3%	Symbol#==

```
/home/kuba/.rvm/rubies/ruby-1.9.1-p378/bin/ruby
```

Total samples: 6

Focusing on: 6

Dropped nodes with  $\leq 0$  abs(samples)

Dropped edges with  $\leq 0$  samples