10 Years of POCO C++ Libraries
Tales of the Underdog

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applied informatics

"Java sounds the death knell for C++"

Kelvin Nilsen, back in 2005

POCO

C++ LIBRARIES

http://pocoproject.org
https://github.com/pocoproject

"Without a good library, most interesting tasks are hard to do in C++; but given a good library, almost any task can be made easy."

Bjarne Stroustrup

Application

NetSSL

Crypto

Tools, Utilities and additional Libraries

Net

Util

Data

SQLite

ODBC

MySQL

XML

JSON

Zip

Foundation

C++ and C Standard Libraries

POSIX, WIN32, other (RT)OS API

10 years

300k

lines of code

1000+

classes

30-50

GitHub Unique Cloners/Day

1260

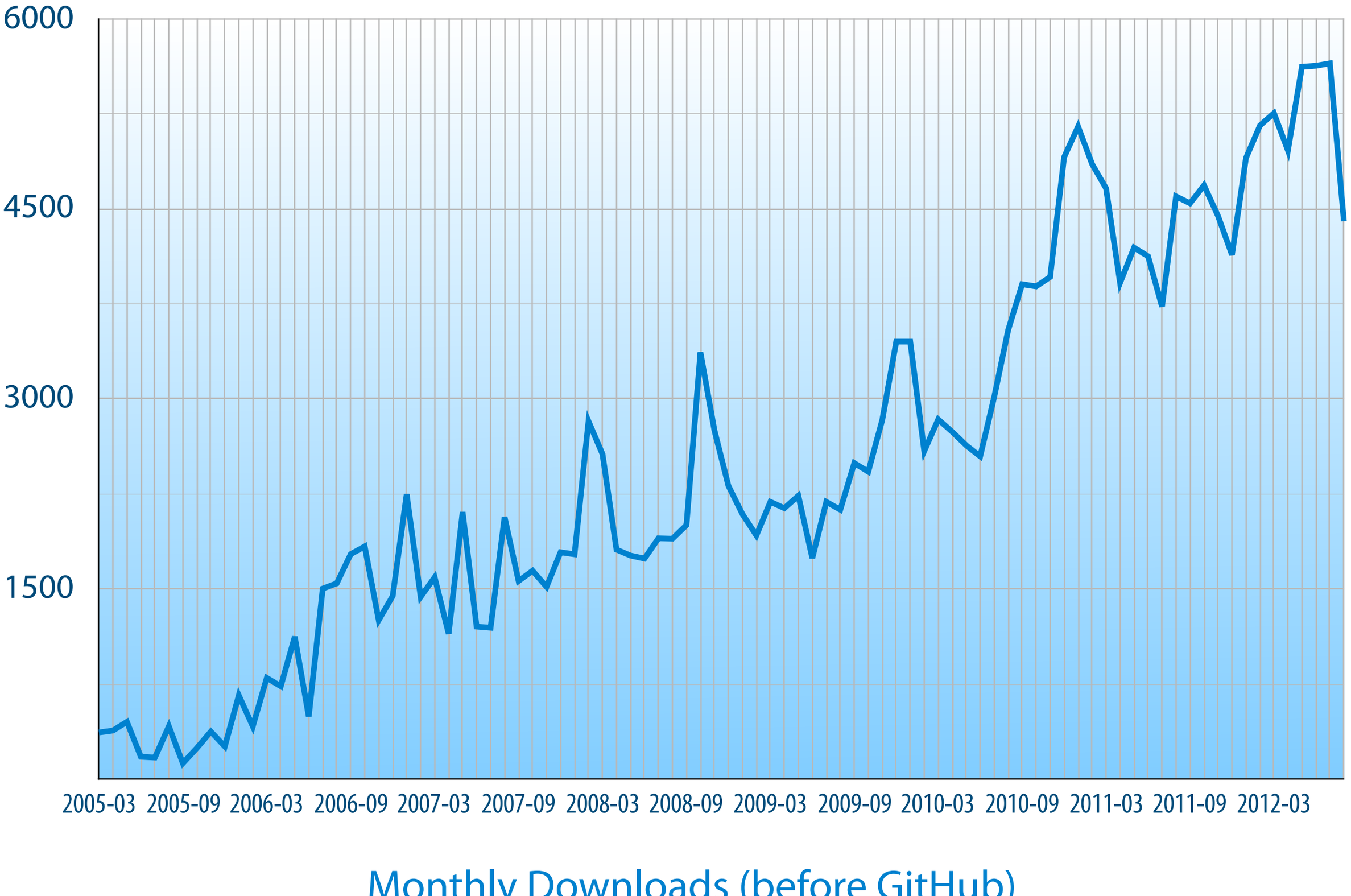
GitHub Stars

472

GitHub Forks

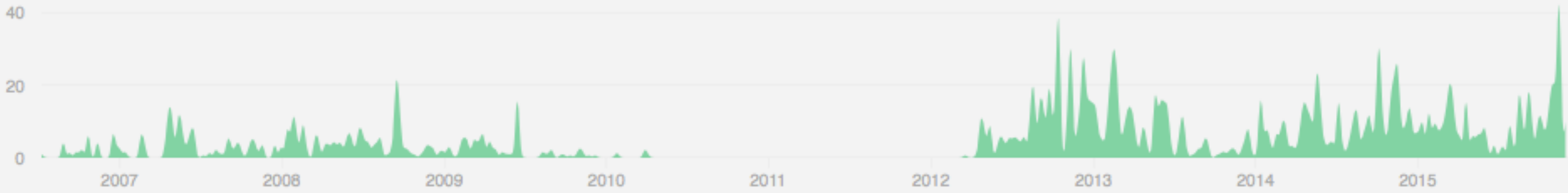
~100

Contributors



Monthly Downloads (before GitHub)

Contributions



GitHub

History & Milestones

08.2004
project started

02.2005
first release on sourceforge

03.2005
first contributor

06.2006
boost license, new website

05.2006
> 1000 downloads/month

01.2006
release 1.0

03.2006
release 1.1
applied informatics founded

11.2006
first major commercial user (> 100 devs)

History & Milestones

01.2007
> 2000 downloads/month

05.2007
relese 1.3

12.2008
bjarne mentions poco in interview

01.2011
> 5000 downloads/month

12.2010
release 1.4

05.2012
joined wg21
> 5500 downloads/month

11.2012
move to GitHub

12.2015
work on 1.7, C++1x

What I Did

- Create something I want to use
- Host it on Sourceforge (02/2005)
- Choose the right license (Boost Software License)
- Get lucky and find a contributor (Alex, 03/2005)
- Get even more lucky and find a paying customer (2006)
- Consistent high quality work
- Make it easy for new users to get started

The project hosting platform matters.

- Get more contributors
- Get more paying customers
- Put out high-quality releases
- Rinse, repeat…

“Benevolent Dictator”

- Two project leads (Günter and Alex)
- Someone in charge is always available
- Monthly Skype calls
- Annual face-to-face meetings

Challenges

- Documentation
- Maintaining quality with growing number of contributors
- Continuous Integration with a cross-platform source code
- Too many build configurations (48 on Windows alone)
- Coding style (need a tool)
- “Fire-and-forget” contributions
- Staying motivated
- Marketing
- Financing

Continuous Integration

- **TeamCity**
  - hosted at Applied Informatics
  - builds Windows (VS2008 - 2015), Windows Embedded Compact 2013, OS X, Linux, Embedded Linux (12 configs)
  - runs testsuites (except embedded targets)
- **Travis**
  - builds Linux (including ARM cross build), runs testsuites
  - “first line of defense”
- **AppVeyor**
  - builds Windows (testsuites coming soon)

Doing It All Again…

macchina.io

A modular open source toolkit for building embedded IoT applications that connect sensors, devices and cloud services.

Follow me…

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