

# Kaffe.org

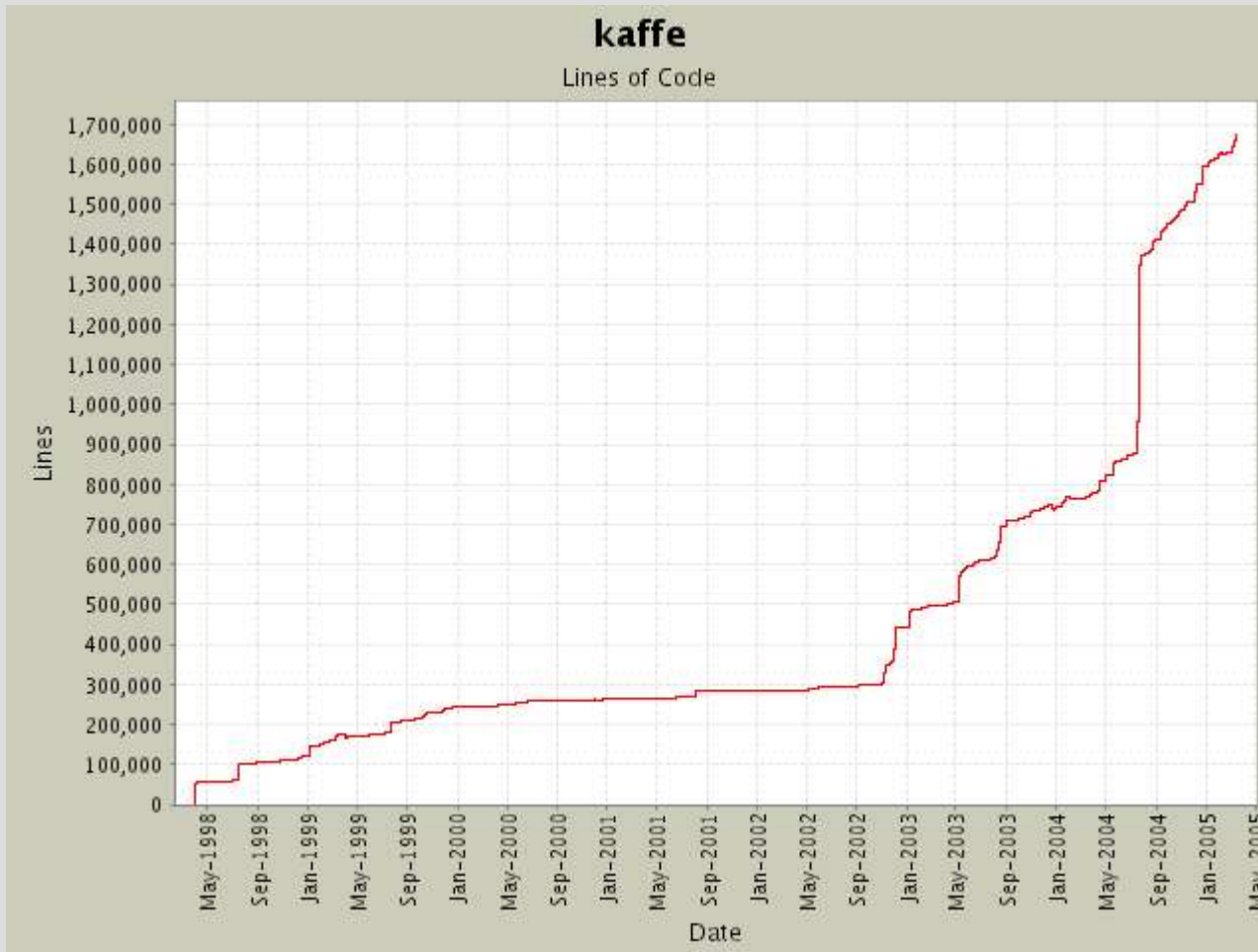
Implementing the platform as Free Software

Dalibor Topic

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Integration, Cooperation & all that

# It is really happening



# What Kaffe.org is

- VM + class libraries + tools
- Well-documented, portable, widely used
- Started in January '96 by Tim Wilkinson
- First JIT by June 96
- And then came ports, more ports & features, better jits, ...
- GPL, like Linux kernel

# Why re-implement the platform?

- Core infrastructure should be Free
- Freedom as in Free Software
- Freedom to do research without hassle
- Make a better, second generation system
- Sun community models didn't work well with Free Software collaboration models.
- Sun's licensing prevents effective collaboration

# What is Kaffe good for?

- Running bytecode
- Interpreter, multiple efficient jit engines
- Dozen of CPU architectures
- More than 50 platforms in total  
(GNU/Linux, \*BSD, OS X, Solaris, eCOS,  
Win32, ...)

# What works?

- 50 packages in Debian based on Kaffe
- ant, jakarta code, Tomcat, hsqldb, JSPWiki, ...
- Work on making Eclipse 3.1 run fine
- ~80% of 1.4 APIs implemented
- It's growing quickly
- more and more things just run

# Building up a working community

- Kaffe development was driven by volunteers and a company until 2002
- 2002 that company closed down
- Kaffe.org lived on, grew stronger
- Build up a backbone around Classpath
- Collaborate with other VMs
- Collaborate with other library projects

# Collaboration as a way of life

- Full Java environment is a lot of work
- We can't do it all with a handful of people
- World is full of clever people
- Find them and start cooperating
- Stand on shoulders of others, rather than reinventing wheels
- Bind the free runtime community closer

# Taking and giving back

- GNU Classpath
- GNU JAXP
- GNU Crypto
- JESSIE
- GNU regexp
- Tritonus
- gjdoc
- DNSJava
- GNU inetlib
- Kjc
- Classpath tools
- JacORB
- Debian

# Where we are going

- Compatibility with Sun's code through TCK
- Verifiable compatibility through Mauve
- Melting pot of class library technology
- Melting pot of VM technology
- Collaborate with more projects, and get the code out there
- OpenOffice.org, JPackage, gcj

# Cooperate outside the box

- OpenOffice.org
- Apache Software Foundation
- GNU/Linux distributions, packagers
- Javali
- Leading the way for other free VMs: gcj, JamVM, SableVM, IKVM, JikesRVM, ...