Pharo: 2.0 Update

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http://www.pharo-project.org
What is it?

- Language + Environment
- Simple Language
- Object-Oriented, Dynamic, Reflective
  - Explore + Change running systems
- The Ultimate Live Programming Environment!
Pharo

- MIT license
- Mac, Linux, Android, iOS, Windows
- Great community of active doers
- Improving steadily
- Many excellent libraries
Pharo Success Stories
cmsbox - Content Management for Websites

Simple to use, web-based Content Management System for SME websites

Unique User eXperience
Inline Editor, Drag & Drop, Cut & Paste, Undo/Redo

Advantages
Flexible designs, individual extensions, outstanding performance and stability

Rock solid application that powers over 500 websites

Website = Editor
Continuous API Testing
keep your services under control 24/7

www.2denker.de
eMCee is a monitoring service for backend interfaces

- Web application to define backend interfaces
- Monitors reliability of interface periodically
- Sends warning if status of interface changes
- Provides overview graphs about reliability
- Snapshots requests for debugging purposes

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eMCee is developed and deployed using pharo

- zinc
- seaside
- jquery
- magritte
- mongotalk
- magritte-mongo
- fuel
- metacello
- Entry Level Track & Trace Product
- Complements T3 Full Product
- One Page Javascript HTML5 / Ajax Client
- REST Back End in Pharo Smalltalk
- Gateways to multiple data providers
• Pharo Smalltalk 1.2 & 1.3
• Zinc HTTP Components
• Load balanced Zinc REST Servers
• Zinc REST Client Gateways
• Seaside, Stdb MySQL
Since may 2008

- Pharo 1.0 released October 2009
- 1.4 is the current stable
- Pharo 2.0 BETA. Release: end Feb 2013
2.0 Statistics

- Started April 2012
- 1460 issue tracker entries
  - since start: 6977
- 420 open, all have seen activity in 2012
  - 60 tagged for 2.0
- 506 incremental updates
What has been done?

- Started to rewrite tools
  - Nautilus: new code browser
- Lots of new libraries
  - Fuel: Fast Serialization
  - FileSystem
- Zodiac: SSL support
- Core: 1.36 mb so far (minimal: 89 KB) --> 3.0
2.0: Tools

- New Code Browser: Nautilus
- Refactoring Integrated in main release
- Critic Browser
- Started to rewrite Tools (Spec)
- Andreas Profiler
2.0: Cleanups

- Lots of dead code removed
  - old Smalltalk MVC related code
  - Cleanup in Fonts and Graphics
- Cleanups guided by Code Critics
- ....
2.0: New Libraries

- FileSystem
- Fuel
- Zinc / Zodiac
- New AST model (from RB)
- ASMJiT and NativeBoost FFI
- Libs for Jenkins and Google Issue Tracker
2.0: Infrastructure

- SmalltalkHub: http://smalltalkhub.com
- Continuous Integration: http://ci.inria.fr
- Association
- Consortium
- Pharo Conf (Planing for Spring 2013)
Pharo Consortium

- How to sustain Pharo?
- How do we make sure that infrastructure continues to improve?
- How to structure the community?
- Should we always rely on people free time?
Consortium Members

- Managed by INRIA for now
- Who: companies, institutions, user groups
- Privileged access to the core development team
- Influence priorities of the next development
- Engineering support time
- Job posts
- Training/Conferences special prices
Fees

- **Gold 4000**
  - 4 days of engineering time + multiple job descriptions for job dashboard + diamond sponsor.

- **Silver 2000**
  - two days of engineering time + one job description + diamond sponsor.

- **Bronze 1000**
  - one day of engineering time + diamond sponsor.
Pharo User Association

- Managed by the Pharo Association
- Individuals
  - Premium (99 Euros)
  - Normal (40 Euros)
- In the mid-term it will merge with the consortium
3.0: Preview

- 3.0 will start end of February
- 2.0 will see two bugfix releases
  - Summer: 2.1
  - Winter: 2.2
- 3.0: Continue to **radically** improve!
3.0: New Compiler

- Currently using original Smalltalk-80 Compiler
- Old-style code base pre-dating OO
  - Scanner is superclass of Parser...
  - Impossible to understand, hard to modify
- Opal:
  - RB AST, Visitors, IR for bytecode
3.0: New ClassBuilder

- ClassBuilder creates new classes and reshapes existing classes
- Very complex code, no tests
- Hard to understand
- Impossible to change
3.0: Slots

- Instance variables are limited
- Slots
  - First class instance variables
  - Active, Property, Boolean, .....
3.0: New Libraries

- Ghost Proxies. Proxy *everything*
- **XStreams.** Current Streams are a mess
- **Athens:** Modern graphics canvas
2.0: ....

- No `.sources/ .changes`: one file
- Bootstrap from repository
- And much more!

- Maybe *you* have something to contribute?
Open Pharo Sprints

May 2008 Bern, July 2009 Bern
October 2009 Lille
November 2009 Buenos Aires
March 2010 Bern
May 2010 Buenos Aires
June 2010 Bern, Bruxelles, London
September 2010 Barcelona, Lille
January 2011 Lille
July 2011 Lille
October 2011 Bruxelles
February 2012 Bern
April 2012 Lille
September 2012 Ghent
November 2012 Lille, Puerto Madryn
Jan 2013: Santiago de Chile
Feb 2013: Lille 8th (next week)