Pharo. Next Steps.

M. Denker

http://www.pharo-project.org
Since 2010

- 535 Updates
- >1050 Issues closed
- 5 Pharo Sprints
- 1 “Deep into Smalltalk” School (Focus: VM)
Since 2010

- 1.3 is released
- 1.4 alpha started
- Jenkins server for testing release
- All VMs are automatically generated using Jenkins
Since 2010

- Hired Igor Stasenko Nov 2011
- Second Full Time Engineer in April 2012
- Pharo Consortium: Got OK from INRIA
Industry Success

- Seaside.st
- Yesplan.be, 2denker.de, netstyle.ch, pinesoft.co.uk.....
- Pier, DrGeo
- Cmsbox.ch: Content Management
- beta9.be: T3 Easy (Pharo server side)
- Moose: www.moose-technology.org
- Airflowing
Community Projects

- Better widgets (A. Plantec, G. Chambers, B. van Ryseghem)
- Better browsers (B. van Ryseghem, C. Bruni)
- Key mapper (G. Polito)
- Serializer (M. Dias, M. Martinez-Peck), Full Proxy (M. Martinez-Peck)
- New source code model: Ring (V. Uquillas Gomez, A. Kellens, S. Ducasse)
- New compiler (J. Ressia/M. Denker/JB Arnaud)
- Zoomable interface (I. Stasenko)
- Bootstrap (B. van Ryseghem/S. Ducasse)
- Package distribution infrastructure (D. Henrichs)
- Network (Zinc S. van Caekenberghe, Ocean N. Bouraqadi, L. Fabresse, J. Laval)
- Remote Smalltalk (N. Papoulias and N. Bouraqadi)
Pharo?

Why do we not continuously improve what we use

????
A **flexible** environment to support the **innovation** in/of Smalltalk.
Pharo

A *robust* environment to support doing *business* in Smalltalk.
It is Working!
Progress is Accelerating
Feedback Loop
Roadmap
Code Model Infrastructure

- Able to query all the versions
- What were the senders of this method in version 13168?
- What is the diff between the senders in the past and the one now?
- Support for merging
- Distributed source code

(Veronica Uquillaz-Gomez)
Code Model Infrastructure

- Ring (V. Uquillaz Gomes/A. Kellens/S. Ducasse)
  - Source code metamodel
  - API compatible with Smalltalk objects
- Adding layers on top of it
- Porting all the tools to use it!
- Reuse tools
Next Steps

- Server for queries
- New source code model
Athens Graphics

- New Canvas
- Vector Graphics API
- Layered Architecture
  - Backend Cairo / OpenGL OpenVG....
- (Igor Stasenko)
Next Steps

- OpenGL bindings using NativeBoost
  - done on Windows
- Stabilize API
- Adapt Morphic
Opal

- We need a more flexible and simpler compiler
- Hooks for DSL support
- Better API
- New generation of tools

- (J. Ressia/M. Denker/JB Arnaud)
Next Steps

- To be added in 1.5
- Throw away the old compiler
- Then improving the API
Fuel: Fast Serialization

- Don’t use ImageSegment (removed in 1.4)
- Fuel is faster (!!!)
- Much more flexible and easier to understand

- Done by M. Diaz, M. Martinez-Peck, (T. Bourgeois & S. Ducasse)
Next Steps

- Replace existing serializers
- Migration path
- Binary code loader
Scripting Syntax: Coral

- We want to write scripts in Pharo :)  
  - Headless
  - REPL
  - Good OS interface (OSProcess for now)
- Coral
  - (D. Pollet and S. Ducasse)
Browsers and Tools

- Throw away StringHolder hierarchy (Yes Browser inherits from StringHolder)
- Browser based on a model
- Nautilus by B. van Ryseghem
- Glamour
Mini Image and Bootstrap

- Pavel’s Mini image
  - 4.2 mb for Seaside
- Work on declarative bootstrapped kernel
  - Analyzed existing solutions
Nice new hardware...

cubox

beagleboard

Raspberry Pi  http://raspberrypi.org
Pharo Consortium

- How to sustain Pharo?
- How to structure the community?
- Can we always rely on peoples free time?
Consortium

- You can participate to the consortium:
  - Pay a fee (company)
  - Individual (free)

- The consortium will pay a full-time engineer to support Pharo tasks
Consortium FAQ

• Pharo will stay free!
• No negative impact: just a better Pharo
• Idea: Organizations should be able to pay
  • Membership
  • Morale License
When

- Started discussions with INRIA two years ago
- INRIA is ok to put money on the table
  - 1 Engineer for one Year
- More than 25 companies are interested
- Join!
Thanks

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