



Pharo. One Year Later

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<http://www.pharo-project.org>

A wide-angle photograph of a majestic mountain range. The peaks are covered in thick white snow, with dark, rocky ridges visible where the snow has melted. The sky above is a clear, vibrant blue, providing a striking contrast to the white of the mountains. The perspective is from a low angle, looking up at the towering peaks.

Smalltalks2010

Pharo?

Why do we not continuously improve

what we use

????

Pharo

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

Pharo

A ***robust*** environment to support doing
business in Smalltalk.

And?

Since Last year

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

Since Last year

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

Since Last year

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

Industry Success

- **Seaside.st**
- **Yesplan.be, 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)

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)
- So we get 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

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!

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