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

????

Pharo

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

Rasperry 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

Alexandre Bergel
Cedric Beler
Torsten Bergmann
Matthias Berth
Ralph Boland
Noury Bouraqadi
Brian Brown
Guillermo Polito
Damien Cassou
Nicolas Cellier
Gary Chambers
Miguel Coba
Gabriel Cotelli
Carlos Crosetti
Cyrille Delaunay
Simon Denier
Marcus Denker
Ramiro Diaz Trepat
Stephane Ducasse
Morales Durand Hernan
Stephan Eggermont
Luc Fabresse

Matthew Fulmer
Hilaire Fernandes
Julian Fitzell
Tudor Girba
Sean Glazier
Norbert Hartl
Dale Henrichs
Reinout Heeck
Eric Hochmeister
Keith Hodges
Henrik Sperre Johansen
Pavel Krivanek
Adrian Kuhn
Adrian Lienhard
Andreas Leidig
Mariano Martinez Peck
Dave Mason
John McIntosh
Johnaton Meichtry
Eliot Miranda
Hernan Morales Durand
Philipp Marshall
Jannik Laval
Yann Monclair
Oscar Nierstrasz

Laurent Laffont
Joseph Pelrine
Alain Plantec
Damien Pollet
Lukas Renggli
Jorge Ressia
Mike Roberts
Robert Rothwell
David Rotlisberger
Michael Rueger
Bill Schwab
Niko Schwarz
Igor Stasenko
Francois Stephany
Serge Stinckwich
Mathieu Suen
Lawrence Trutter
Andrew Tween
martin von loewis
Andres Valloud
Juan Vuletich
Steven Wirts
Hernan Wilkinson