Pharo3

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

- **Language + Environment**
- **Simple Language (Smalltalk)**
- **Object-Oriented, Dynamic, Reflective**
  - Explore + Change running systems

- **The Ultimate Programming Environment!**
Pharo

- MIT license
- Mac, Linux, Windows, (Android, iOS)
- Great community
- Improving steadily
- Many excellent libraries
Started 2008

- Pharo 1.0 released October 2009
- 2.0 is the current stable (5th release)
- Released March 2013

Plan: 1 Release per Year
Pharo3: Release March 14

- Started March 2013
- 2021 Issue tracker entries with Pharo3 tag closed
- 733 Updates
- 40 issue as TODO for release
Lots of Activity
Infrastructure: CI

- https://ci.inria.fr is stable and used a lot

- Every fix is validated automatically before human review
- Every update triggers test run on 3 Architectures
- over 80 projects in pharo-contribution
ci.inria.fr/pharo-contribution/
Infrastructure: Misc

- http://files.pharo.org
- http://get.pharo.org
- SmalltalkHub: http://smalltalkhub.com
  - 1025 users, 1200 repos, 15mill hits/day
Small Stuff

- Lots of Cleanups
- Lots of tuning (performance, memory)
- Lots of small improvements
Lots of larger things

- Closure class now standard in Pharo3
- Terminal output for stderr
- Cleanup Source file related code
- AST Interpreter
- AST based Navigation in Browser

- Komitter
- Launcher
- Font Speedup
- ....
New Inspector

- Unify Inspector and Explorer
- Make specialised inspectors visible
Athens: Vector Graphics

- New API for Vector Graphics
- Independent of Backend
  - For now: Cairo
  - Balloon3D for Debugging
- Future: OpenGL
Athens: Demo
Opal Compiler

- Uses RB AST
- IRBuilder: Bytecode backend with high-level builder
- Much easier to change
- Basis for Reflectivity (see Pharo4 talk)
New ClassBuilder

- Replaces the old ClassBuilder
- Easier to understand and more flexible
- Basis for Slots (see talk about Pharo4)
New Debugger

- Model now separate from View
- Model is scriptable
- Debugger is extensible with Commands
Command Line

denker$ ./pharo Pharo.image --list

Currently installed Command Line Handlers:

  Fuel          Loads fuel files
  config        Install Configurations
  save          Rename the image and changes file
  update        Load updates
  printVersion  Print image version
  st            Loads and executes .st source files
  test          A command line test runner
  clean         Run image cleanup
  eval          Directly evaluates one line scripts
Pharo Consortium

Started 2013

- 13 Members
- 6 Academic Partners
- 3 Sponsors

http://consortium.pharo.org
Pharo Association

Started 2013

- For individuals
- around 60 Members
- Consortium and Association will merge

http://association.pharo.org
Pharo Books
Open Pharo Sprints

May 2008 Bern
July 2009 Bern
October 2009 Lille
November 2009 Buenos Ares
March 2010 Bern
May 2010 Buenos Ares
June 2010 Bern
June 2010 Bruxelles
July 2010 London

September 2010 **Barcelona**
September 2010 Lille
January 2011 Lille
July 2011 Lille
October 2011 Bruxelles
February 2012 Bern
April 2012 Lille
September 2012 Ghent
October 2013 Lille
November 2013 Buenos Aires