# Pharo 2.0: an exciting milestone

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http://www.pharo.org



















## BetaNine Sensus HighOctane











It feels like...

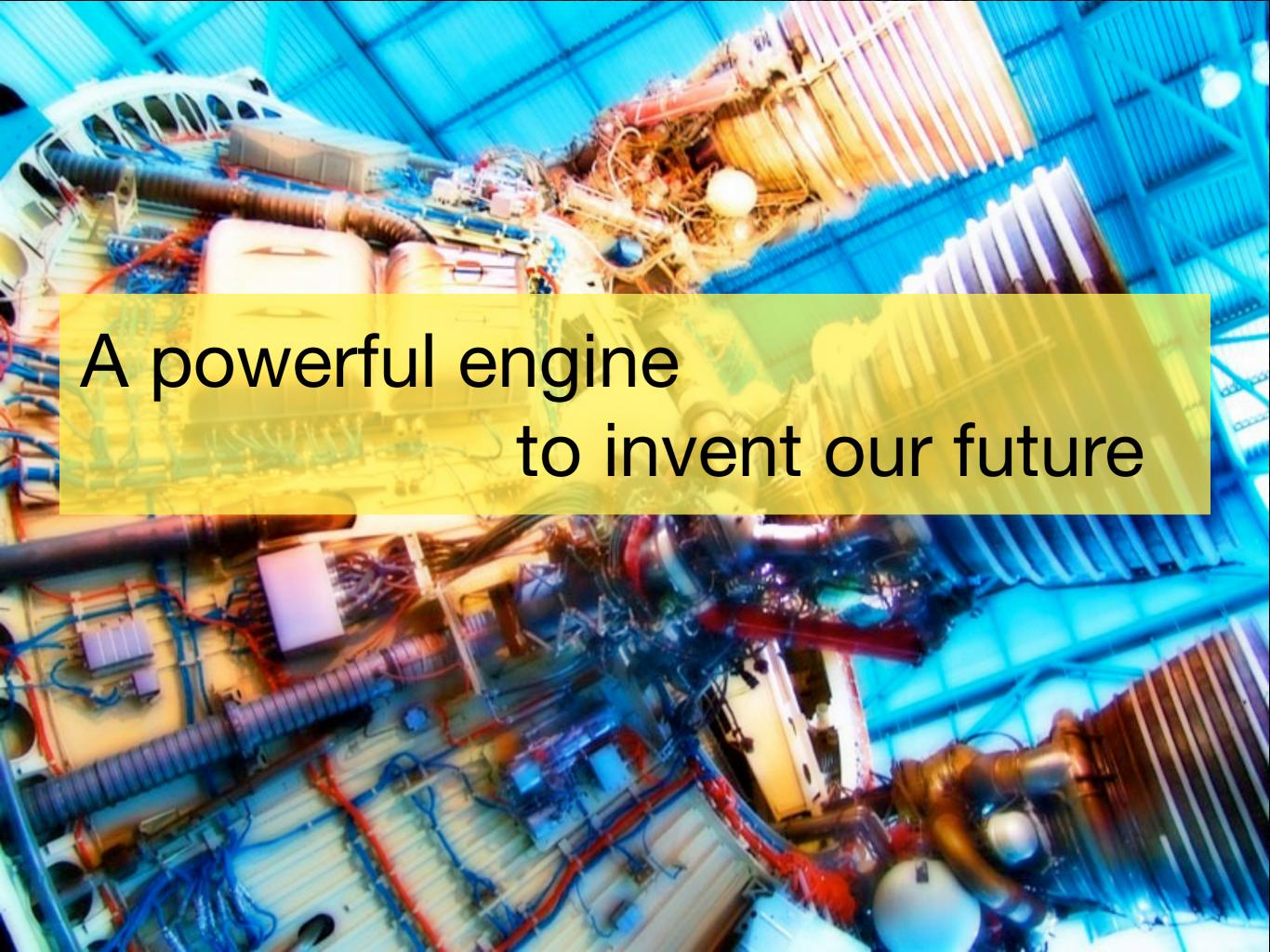


#### Pharo

- Pure object language
- Great community of active doers
- Powerful
- Elegant and fun to program
- Living system under your fingers

- VM running on MacOSX, linux, Windows
- Compiler, Core classes (stream, collections, unicode)
- IDE (editor, inspector, debugger, code versioning,...)
- Ul frameworks (widgets, theme)
- **FFI**
- Graphics (soon opengl)
- Hyper fast object serializer
- Network, HTTP

- Web frameworks: seaside, iliad, HTTP2
- XML, HTML scraping, Zodiac (HTTPS)
- Graphics frameworks: Roassal, Mondrian, EyeSee
- Tool builder: Glamour, MetaTools: Moose
- Database: DBXTalk, Mongo, Riak, CouchDB
- Proxy, Logging
- Units (Aconcagua, Units)
- Parser: Petit Parser, SmaCC
- Mathematical ...



# Our goal...



We want that \*\*you\*\* can make money with Pharo. We want to be able to invent solutions to existing problems.

We want a powerful innovative dynamic language where we can build our future.

# Some Pharo's success stories

- Seaside.st, SmalltalkHub,
- Yesplan.be, netstyle.ch,
- ➤ Pier, DrGeo, VBridge,
- Cmsbox.ch, objectFusion,
- **T3 Easy from beta9.be,**
- moosetechnology.org, pinesoft.co.uk,
- \* Airflowing, synectique, miriamTech, 2denker...

# We want more success stories!

# A0r2013 (593 updates)

A massive amount of improvements

## Since may 2008

- Pharo 2.0 Apr 2013 (593 updates)
- Pharo 1.4 Apr 2012 (860 updates)
- Pharo 1.3 (700 updates)
- Pharo 1.2 mar 2011 (500 updates)
- Pharo 1.1 jul 2010 (410 updates)
- Pharo 1.0 oct 2009 (470 updates)

### 2.0: UI

- Spec: a new way to build UI (chapter under way)
- Widget enhancements. Revamp progress bar
- Layout improvements/cleanups.
- Keybindings
- New icons (famfam). "Growl" style notifications.
- Rectangle intersection improvements.

### 2.0: Developer tools

- Nautilus Browser: groups, hierarchy, icon navigation
- Critics Browser
- Interactive navigation (cmd+click on class/selector)
- Spotlight (shift+enter)
- Diff tools enhancements
- Unify/clean Smartcharacters and completion
- Shout themes
- Andreas's Profiler

## 2.0: Compiler

- RB AST
- Error Node
- the foundation for the AST interpreter in 3.0

# Networking

- New version of Zinc
- Zodiac SSL

## 2.0: System

- SystemAnnouncer (first class events no symbol)
- RPackage (just plain real object)
- Manifest (Package meta-data)
- Extensible Command-line
- NativeBoost
- Ring Meta Model

# 2.0: System (2)

- Fuel instead of 'smart' ref streams
- FreeType fonts better handling (resources)
- Session-aware code
- Metacello
- FileSystem
- DateAndTime refactoring (UTC internally)

#### 2.0: VM

- Latests cog builds
- Branding
- SSLPlugin
- FilePlugin enhancements
- SocketPlugin fixes
- Included libraries: freetype2, cairo

## 2.0: Cleanups

- Removal of FileDirectory
- Removal of ReferenceStream and bros

#### 2.0: Infrastructure

- ZeroConf script (chapter)
- Continuous integration for everything
  - pharo/core
  - pharo/contributions (ask if you need)
- SmalltalkHub

### Vision Document around 2.0

- https://gforge.inria.fr/frs/download.php/30434/ PharoVision.pdf
- 3.1 Towards a small kernel [we have it now we should think about migration]
- 3.2 Towards a verified package catalog [On the way]
- 4.1 A Robust and Extensible System Events [Beta and should be in 3.0]
- 4.2 Rewrite of Filesystem/Streams
  [DONE for Files]
- 4.3 Announcements and Ephemerons [Annoucements Done. More Enh for 3.0]

- 4.4 UI Canvas for Zoomable Interface [Waiting for TextModel and 3.0]
- 4.5 Bootstrap of the Core [Done should be integrated in 3.0]
- 4.6 Fully parametrized compiler tool chain [Start with Opal in 3.0]
- 4.7 Packages as real objects [in 2.0 and will improve in 3.0]
- 4.8 Package Meta-Data [Done]
- 4.9 Less Model Clutter and Duplication [Started in 2.0 will be accentuated in 3.0]

- 4.10 Building and Reusing UI Logic [First cut in 2.0 UIPainter for 3.0]
- 4.11 New Network Layer [Nothing]
- 4.12 Serializers [Done]
- 4.13 SystemChangeNotifier replacement [Done]
- 4.14 Cleaning Morphic [To be continued in 3.0]
- 5.2 VMs identification and regression testing [On the way]
- 5.3 One Unified FFI framework [before June]

# We want to improve the complete system!

# Not just a nice library on top of ...

# Of course not everything is perfect

# Retrospective analysis to make progress

# But we believe in non linear growth

# Community Ongoing Work

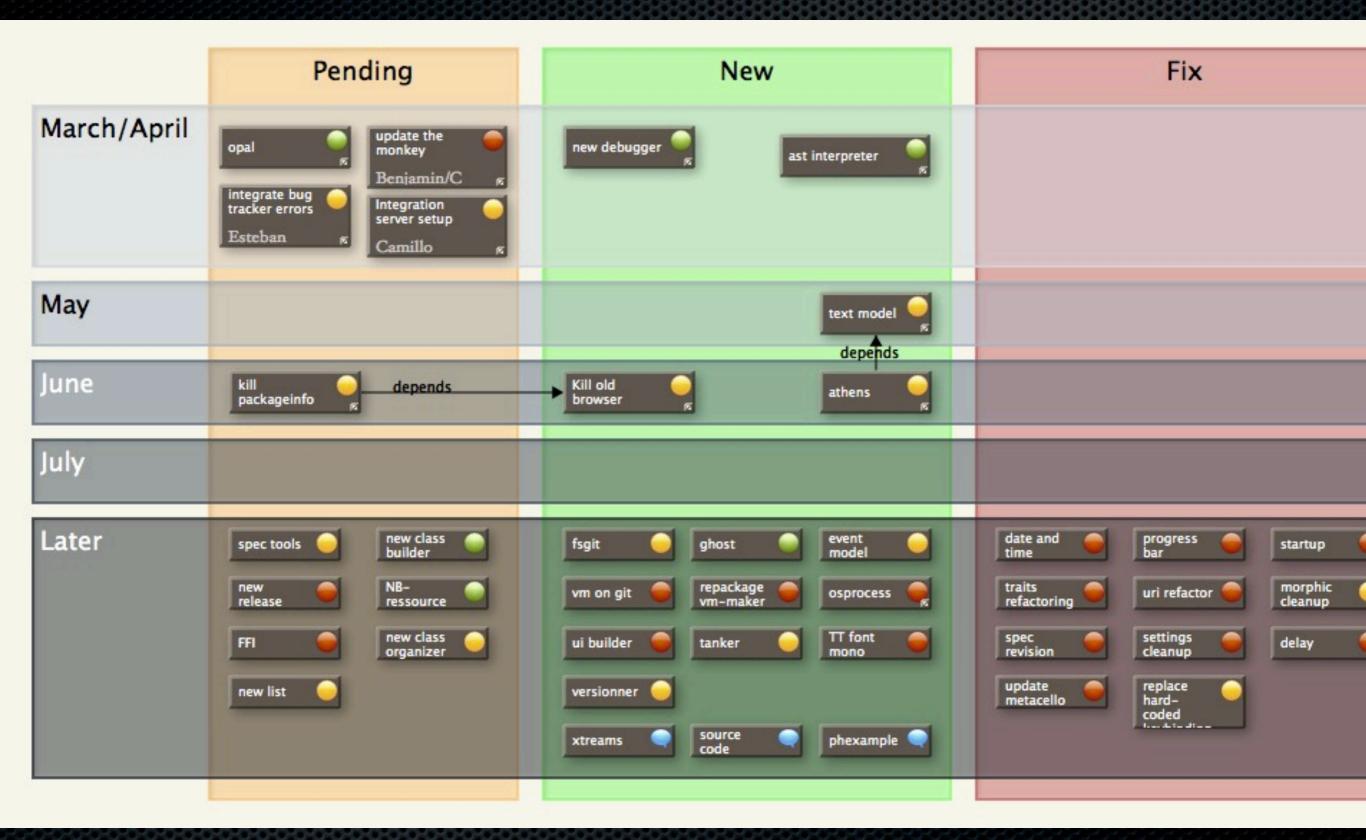
- Better widgets, UI Builder (A. Plantec, G. Chambers, B. van Ryseghem)
- Better browsers (B. van Ryseghem, C. Bruni)
- Proxy (M. Martinez-Peck)
- New compiler (J. Ressia/M. Denker/JB Arnaud/)
- Vectorial canvas (I. Stasenko)
- Better FFI (I. Stasenko, E. Lorenzano)
- Bootstrap (G. Polito/S. Ducasse/N. Bouraqadi/L. Fabresse)
- Package distribution infrastructure (D. Henrichs)
- PDF generation (O. Auverlot, G. Larcheveque)
- Network (Zinc, Zodiac S. van Caekenberghe)
- Remote Smalltalk (N. Papoulias, N. Bouraqadi)

#### New Process

- To dynamise and stabilize a long cycle
- Chunked per month
- Retrospective analysis
- Continue to have a Summer release and an alpha

## Glimpse at 3.0

- OPAL for real
- Athens
- Integration process using metacello!
- UlPainter
- Remove PackageInfo for real
- Validated packages

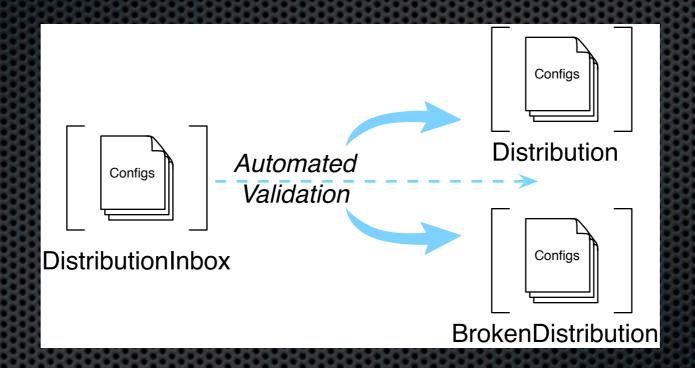


# Distributions: towards a certified catalog

- I want to go to Mars with just a DVD,
- and still be able to load the projects I want,
- and get the right ones loaded.

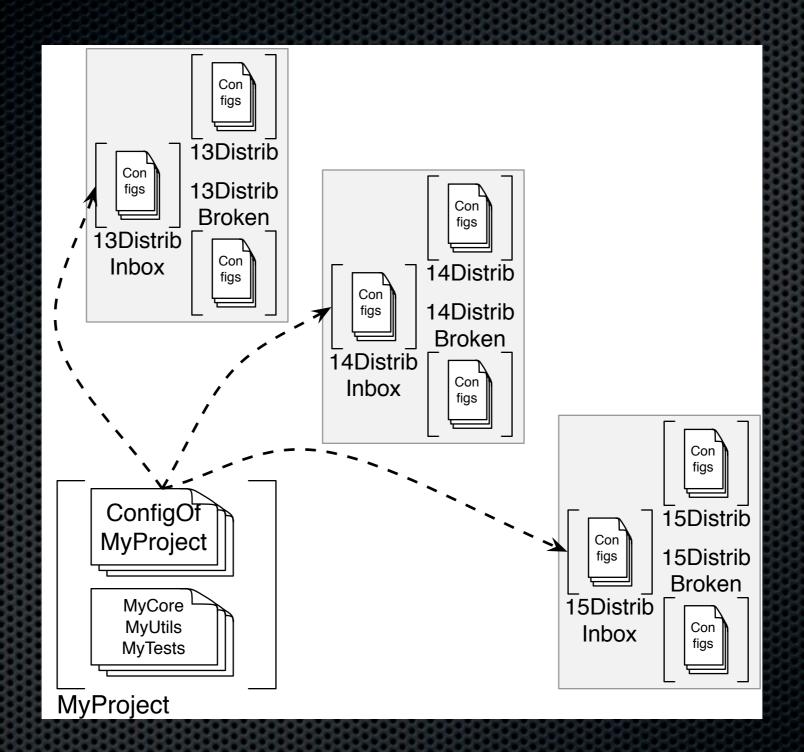
## Package certification

- Packages should be more self contained
- Tests
- LintRules
- Meta data
- Run and automatically certified

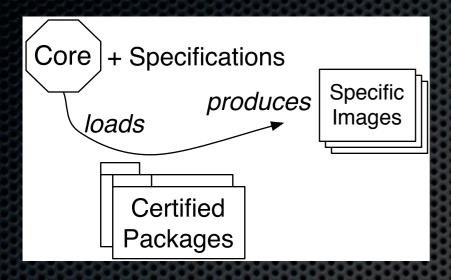


#### Process

- You use Metacello!
- You publish in your repo!
- When you want you can release code to a distribution
- All the code then is recursively copied to the distribution space
- All the tests and quality rules are checked
- People use your code but with a certain level of confidence :)



### Core and ...





### Consortium & Association

- How to sustain Pharo?
- How to structure the community?
- Let us talk about it tomorrow:)



Pharo is a clean, innovative, open-source Smalltalk-inspired environment. Pharo's goal is to deliver a clean, innovative, free open-source Smalltalk-inspired environment. By providing a stable and small core system, excellent dev tools, and maintained releases, Pharo is an attractive platform to build and deploy mission critical Smalltalk applications. The license of Pharo is MIT with some original parts remaining under the Apache License. All contributors are required to sign our license agreement.

The consortium is for legal entities, if you are an individual that wants to support Pharo participate to the Pharo association.

#### Pharo consortium portal

A clean, innovative, open-source, Smalltalk-inspired environment.

#### What's new (See all)

#### A new age for Pharo

1 March 20135:37:47 pm by Stéphane Ducasse

After some efforts, we are proud to announce the consortium around Pharo. With such consortium companies and academic partners will be able to collaborate and sustain the development of the Pharo envi...

Entries (RSS) and Comments (RSS)











#### This is the Pharo users association site

Pharo is a clean, innovative, open-source Smalltalkinspired environment.

Home Members News About

#### Pharo books

- Pharo by example
  - translated to french, merci!
  - translated to spanish, gracias!
  - japanese, german started

### New books are coming

- Deep into Pharo
- Pharo for the Entreprise
  - If you want to contribute...
- A glimpse at VM



- We thank all the contributors, we know who you are :)
- Thanks SCG & T. Girba for this cool conference
- Inria and RMoD for their continuous support

