Development

- 12 months
- over 1400 closed issues
- almost 500 integrations
- at least 86 image developers

Pharo 6
People


...and many many more...

Pharo 6
64 bits

- long way with many steps
  (Spur, UFFI, bindings, image code...)

- huge images, no need of 32-bit packages...

- standalone 64-bit VM and image

- conversion needed
  Spur32to64BitBootstrap new bootstrapImage: 'Pharo.image'

- some steps needed (Windows VM, Iceberg)

Pharo 6
E p i c e a

in Pharo: EVERYTHING is an object

method ≠ method source code
class ≠ class definition source code

desynchronization?

Smalltalk-80 solution:
- *.changes file
- efficient
- powerfull but insufficient for modern needs
Epicea

- code changes management tool
- independent on source code model
- high level: aggregate changes refactorings, behavior copying, expression evaluation, IDE events...
- nice UI (filters, image evolution trees...)
- addition to *.changes mechanism, future replacement
Git

- libgit2 provided with the VM
- Iceberg

https://github.com/pharo-vcs
### Iceberg repositories

<table>
<thead>
<tr>
<th>Current branch</th>
<th>Loaded version</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>master</td>
<td>84042fa (12 April 2017)</td>
<td>1 incoming</td>
</tr>
<tr>
<td>master</td>
<td>2a86f76 (19 April 2017)</td>
<td></td>
</tr>
</tbody>
</table>
- Git repositories manager
- preview for Pharo 6 (default for Pharo 7)
- covers everyday tasks
- GitHub pull requests
- metadata-less FileTree format

https://github.com/pharo-vcs/iceberg
OpenSmalltalk

- Pharo VM is now part of OpenSmalltalk initiative
- commonly managed VM for Pharo, Squeak, Cuis and Newspeak
- closer collaboration
- Git

https://github.com/OpenSmalltalk/opensmalltalk-vm
Bootstrap

- image bootstrapping from source codes (after 40 years)
- alternative to image snapshots
- control what the image contains
- easier changes and experiments
- enforces modularity
- customizable images
- special VM simulator
- bootstrap small kernel
- reload required packages
  compiler ➔ Monticello ➔ Metacello ➔ baselines
- Pharo 6 released in non-bootstrapped form
- bootstrapping default for Pharo 7
Addoption

Easy!
- stabilization of Pharo 5 codebase

Two double quotes inside comments
"This code prints ""I love Pharo!"" and saves the image"

Important deprecations:
Object>>#name
Object>>#ifNil:ifNotNilDo:
Object>>#ifNotNilDo:
Object>>#ifNotNilDo:ifNil:
Collection>>#groupBy:having:
Collection>>#isEmpty:ifNotEmptyDo:
Collection>>#ifNotEmptyDo:
Collection>>#ifNotEmptyDo:ifEmpty:
IDE

- GTools faster (FastTable)
- improved debugger
- more responsive (Cmd+.), progress bars
- filtering in MessageBrowser
- improved QualityAssistant (new model)
- examples easier to execute
  - pragmas <example>, <sampleInstance>
- small Nautilus improvements
Other

- working directory structure (pharo-local)
- Reflectivity and Metalinks improvements
- memory leaks fixes
- better autocategorisation of methods
- FuzzyMatcher
- better UUIDs generation
- improved newAnonymousSubclass
- inheritable process specific variables
- RecursionStopper
- more documentation
- UI elements improvements
...etc...
Pharo 6.1 comes with Iceberg 0.5.5
- running on macOS 64bit
- adds cherry pick
- performance improvements for big repositories
- adds pull request review plugin
- repositories browser: group branches by remote
- adds bitbucket and gitlab metacello integration
- uses Libgit v0.25.1 as backend

Linux VM by threaded heartbeat by default.

Small image-level bugfixes
Pharo 6

Thank you