Pharo 7.0 and 8.0 alpha

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http://www.pharo.org
Let us start with a super super cool announce...
Consortium...

- Lifeware supports one year engineer to support improve Pharo infrastructure
- Schmidt supports one year engineer to support improve Pharo infrastructure
For Pharo 8.0: 4 engineers

Esteban
Iceberg
C
FFI
Spec
VM

Pablo
ClassBuilder
NewTraits
Iceberg
C - FFI
Windows
VM

Cyril
UI
Tools
Spec
Web
Fixing
Cleaning

Guille
Iceberg
ClassDef
TaskIt
Spec
Tests
Windows
Pharo 7.0
testCheckEmptyQueryWhenThereIsNotEmptyResult

| query result |
| query := self createQueryFromScopeOf: self class.
| result := environment createQuery: query.
| self assert: result items notEmpty.
| self deny: (environment isQueryEmpty: query)
P7.0 in a Nutshell

- 64-bit version in Linux and OSX
- PharoLauncher
- Totally new build process with its full bootstrap from sources
- All source on github
- Iceberg, the git client significantly improved
- Calypso, the angular stone of PharoThings, is the new system Pharo browser
Nautilus (Jules Verne)
Calypso (Cousteau)
Calypso & its submarines
The new Pharo process*

- Bootstrapped
- Git, GitHub and Pull Requests (with Iceberg)
## Test pending pull request and branch Pipeline

This task tests everything - latest integration - pending pull request - branches. It also uploads build artifacts if in development branch.

<table>
<thead>
<tr>
<th>S</th>
<th>W</th>
<th>Name</th>
<th>Last Success</th>
<th>Last Failure</th>
<th>Last Duration</th>
<th>Built On</th>
<th>Fav</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>PR-1529</td>
<td>1 mo 15 days - #11</td>
<td>14 days - #13</td>
<td>29 min</td>
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<td>PR-1544</td>
<td>N/A</td>
<td>23 days - #7</td>
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<td></td>
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<td></td>
<td>PR-1609</td>
<td>19 days - #9</td>
<td>1 mo 22 days - #4</td>
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<td></td>
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<td>30 min</td>
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Why?

- Reproducible.
- Verified (CI).
- Process of review and approve get’s accessible to all community (and we can “distribute ownership”).
- Visibility.
- Now we can: release often, back-port better, LTS.
Some numbers

- More than **2140** Pull Requests closed.
- **104** GitHub forks. [now in P8 143 ]
- **63** contributors. [now in P8 78 ]
- And that not counting Iceberg, Calypso and others.
Since we are always improving…

• Stateful traits*

• Streams refactor

• Working directory now is a real working directory (and there is #imageDirectory that works as before)

• UFFI has been adapted to Windows 64bit

• “Plugin replacement program”: move to the image while is possible (FreeType done, SSL ongoing)

• Windows 64bit VM closer and closer

• The OpenSmalltalkVM has continued improving in several ways. Not just Cog (The “Core VM”) but also specific plugins like FilePlugin for Windows
Pharo 8.0 roadmap
We will support

... let us have a look
List summary

- File primitives performance on Windows
  - 8
- cmd+dot not working in all cases
  - 9
- Parallel processing (not just parallel testing, which can be resolved at image side)
  - 8
- Memory management and general command line usability/documentation
  - 8
- GC stops 2-3min for fullGC (in large images)
  - 9
- Parallel testing
  - 9
- Refactorings
  - 8
- Degradation in performance
  - 8
- Latency (on spotter and completion), remarkable in large images.
  - 8
- Quality rules on big classes/images
  - 8
- Multiple windows
  - 8
List summary ...

- Spec v2.0
- Better FFI Infrastructure
- Better windows integration
- Basic encryption
- Zip
Supporting business

- Better 64 bits Windows
- Support for multiple graphical backends
- Much better UFFI
- Avoid multiple solutions doing the same (TextEditor, …)
Pharo 8.0 alpha

- Headless VM
- Use new block closure
- Deprecating Glamour
- Rewriting (all) tools to Spec 2.0
- Improving refactorings
- Improving eCompletion
- DrTests
Infrastructure

- UndefinedClasses ✓
- Compiler enhancement ✓
- ClassDefinition Parser ✓
- Scriptable/Object-centric debugger
Yes this is too much...

- This list is seriously too large
- We need help from the community!
You can have an impact

- With one hour per week...
- Enhance tests
- Add tests
- Review fixes
- Fix simple points
- Do not make us lose time...