Pharo Status

Pharo Consortium Meeting
consortium-adm@pharo.org

29 Septembre 2022

ESUG 2022
https://esug.github.io/

- In Novi Sad

- Return to live meeting!!!

- Great Presentations

ESUG 2022
https://esug.github.io/

- +65 Participants

- Incredible Exchanges

- 30 Presentations

- 1 Live Music Performance

- The Always great Show Us your Projects

ESUG 2022
https://esug.github.io/

- +65 Participants

- Incredible Exchanges

- 30 Presentations

- 1 Live Music Performance

- The Always great Show Us your Projects

E
S
U
G
NOVI [I] SAD
2022

A Great Success

Pharo 11 - Roadmap

- Good time to propose/request/desire features

- Keeping our same objectives:

  - Modularisation

  - Clean up

  - Improvements

Pharo 11 - Roadmap

- Good time to propose/request/desire features

- Keeping our same objectives:

  - Modularisation

  - Clean up

  - Improvements

A mix of Features and Cleanings

Pharo 11 - Roadmap

- UI Issues (Monterrey / Linux / Windows)

- Window Manager (Multiple Windows)

- Stability

- Compiler Improvements

- Ephemerons / Image Initialisation

- Iceberg Revamp

- App Packaging / Better GTK Packaging

- Pakbot

- Graphics Improvements (Cairo, HDPI, Athens, Alexandrie, Roassal)…

Pharo 11 - Roadmap

- UI Issues (Monterrey / Linux / Windows)

- Window Manager (Multiple Windows)

- Stability

- Compiler Improvements

- Ephemerons / Image Initialisation

- Iceberg Revamp

- App Packaging / Better GTK Packaging

- Pakbot

- Graphics Improvements (Cairo, HDPI, Athens, Alexandrie, Roassal)…

We can still fit your requirements

Pharo VM

- Updating Third Party Dependencies (Cairo, SDL, Libgit2)

- Perm Space

- GC Stability (Ephemerons, Weaks, Pinned Objects)

- SIMD initial support

- Cleaner, Smaller, Simpler…

Pharo VM

- Updating Third Party Dependencies (Cairo, SDL, Libgit2)

- Perm Space

- GC Stability (Ephemerons, Weaks, Pinned Objects)

- SIMD initial support

- Cleaner, Smaller, Simpler…

Under Initial Alpha Testing

Pharo VM
PermSpace - Snapshots

- Adding a new Generation of permanent Objects

- New Image Format

- A fixed memory map

- Extensible to save more elements in the future:

  - Machine Code

  - Stack

Pharo VM
PermSpace - Snapshots

- Objectives:

  - Fasters GC (Perm Objects, less frequent)

  - Faster Load / Save (Direct Memory Mapping)

  - Discarding less elements of the runtime (Machine Code, Stack, etc)

Pharo VM
PermSpace - Snapshots

Possible by the support of

Lifeware

- Objectives:

  - Fasters GC (Perm Objects, less frequent)

  - Faster Load / Save (Direct Memory Mapping)

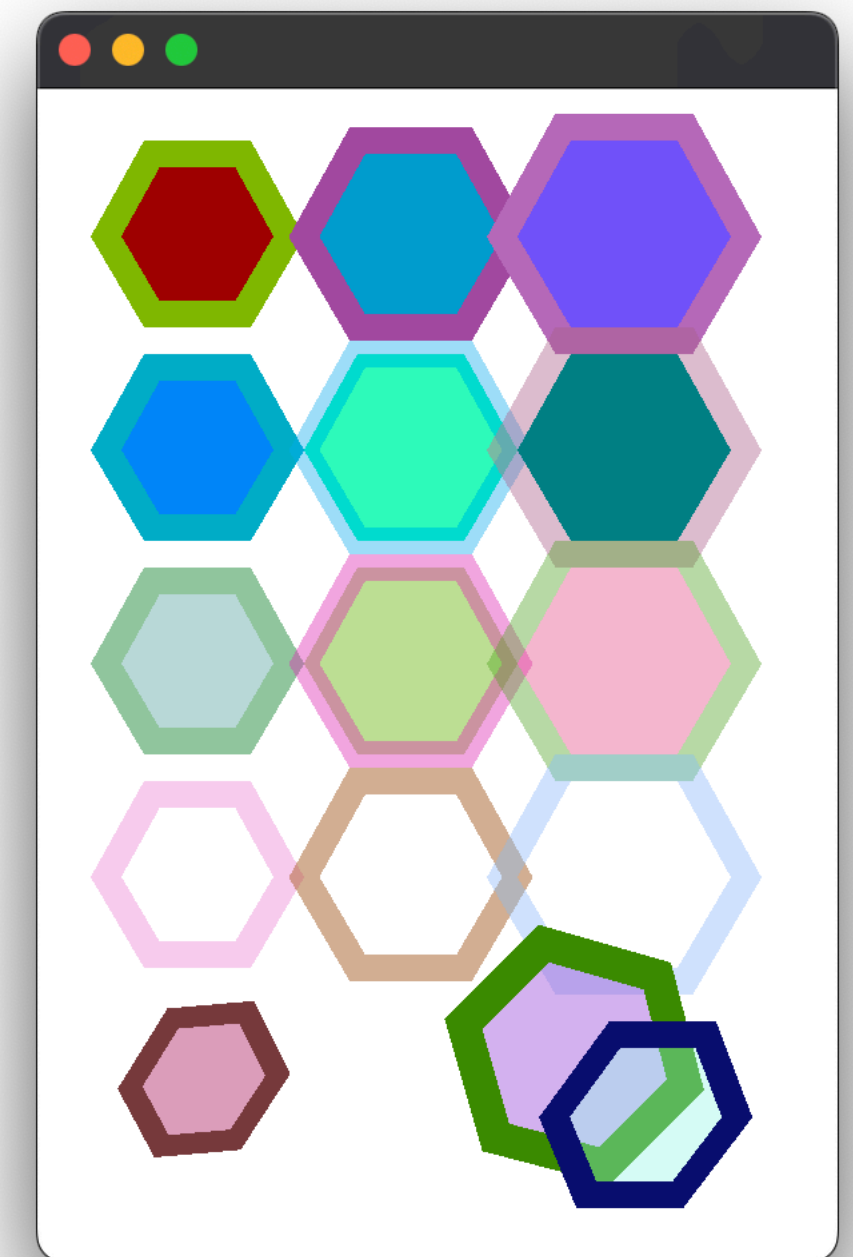 - Discarding less elements of the runtime (Machine Code, Stack, etc)

Bloc - Alexandrie - Cairo
Faster, Simpler, Cleaner

A clean library to be included in Pharo

- Make it easier to understand

- Have a clear maintenance process

Our code retrofits a part of the development made by feenk

Bloc - Alexandrie - Cairo

Stay with simple FFI bindings to C libraries

- Works on all Pharo's platforms

- GPU acceleration

- Active gamer community

- Stable. Active gnome community (it's the way to draw custom widgets in gtk 3 and 4).

- Not GPU-optimized but we can use buffering, layer composition and other techniques to mitigate.

Bloc ⟹ Alexandrie **NEW**
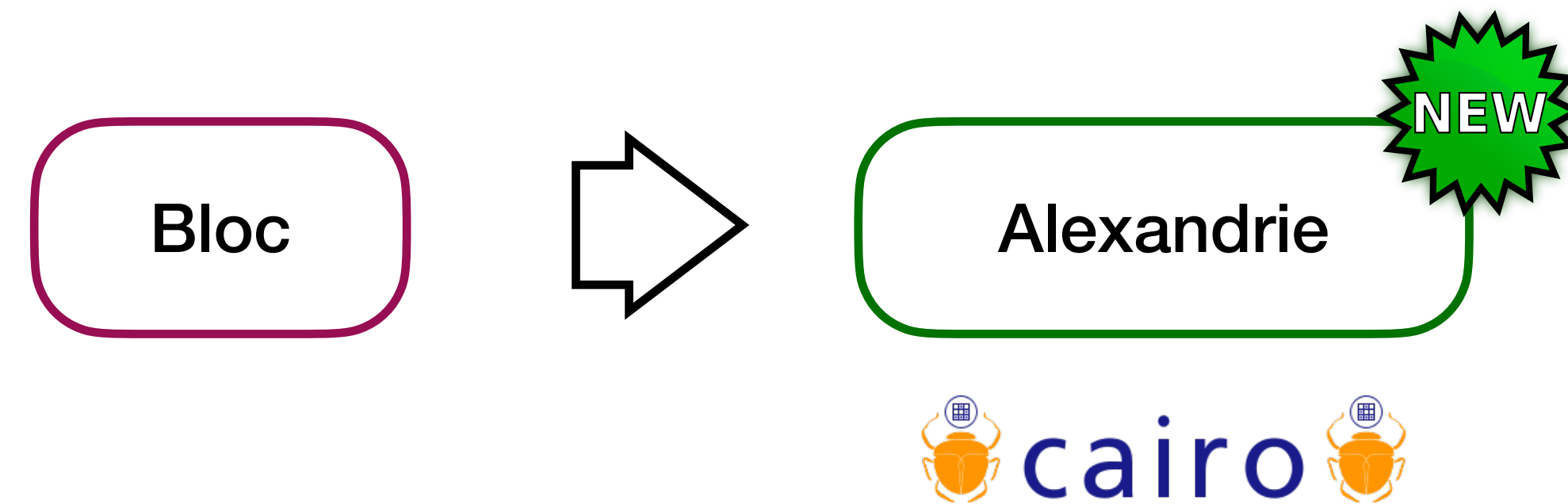
cairo

Call the C API smartly

Avoid redundant calls

Start by rendering Bloc elements
faster, then look for abstract API

Bloc + Alexandrie v1.0

- Support for most features of Sparta-Cairo, but fast.

- Doesn't depend on SurfacePlugin, like Sparta-Cairo, unlike Athens-Cairo

- Bloc v1.0 comes with Alexandrie, plus Sparta-Cairo and Sparta-Skia.

- Check it: https://github.com/pharo-graphics/Bloc

Bloc + Alexandrie v1.0

- Support for most features of Sparta-Cairo, but fast.

- Doesn't depend on SurfacePlugin, like Sparta-Cairo, unlike Athens-Cairo

- Bloc v1.0 comes with Alexandrie, plus Sparta-Cairo and Sparta-Skia.

- Check it: https://github.com/pharo-graphics/Bloc

Version 1.0 Released

Bloc + Alexandrie Next

- Optimize transformations (this is Bloc level)

- Cache more Cairo objects

- Layer composition and Buffer unchanged elements

- Effects (blur, shadow)

- Bug in SVG path geometry

- Clear API (still not stable)

Bloc + Alexandrie Next

- Optimize transformations (this is Bloc level)

- Cache more Cairo objects

- Layer composition and Buffer unchanged elements

- Effects (blur, shadow)

- Bug in SVG path geometry

- Clear API (still not stable)

Possible by the support of

THALES

Pharo Promotion
Books

- Pharo with Style

- Pharo by Example 9

Available for Printing

books.pharo.org

Pharo Promotion
Mooc

- Revamp of the Pharo Mooc

- A new Advanced Mooc on the Works

mooc.pharo.org

Pharo Promotion

Mooc

Downloadable,
Accessible,
Multiple Langs

- Revamp of the Pharo Mooc

- A new Advanced Mooc on the Works

mooc.pharo.org

Pharo Promotion

- Books - books.pharo.org

- Mooc - mooc.pharo.org

- Blog - thepharo.dev

Thanks!!!

pharo.org

consortium

consortium-adm@pharo.org
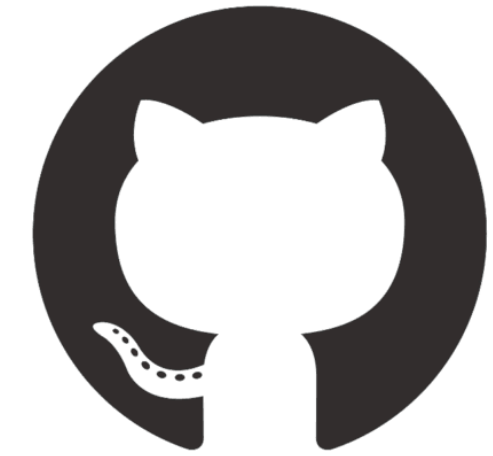
pharo-project/pharo

discord.gg/QewZMZa

thepharo.dev

[DEV]