

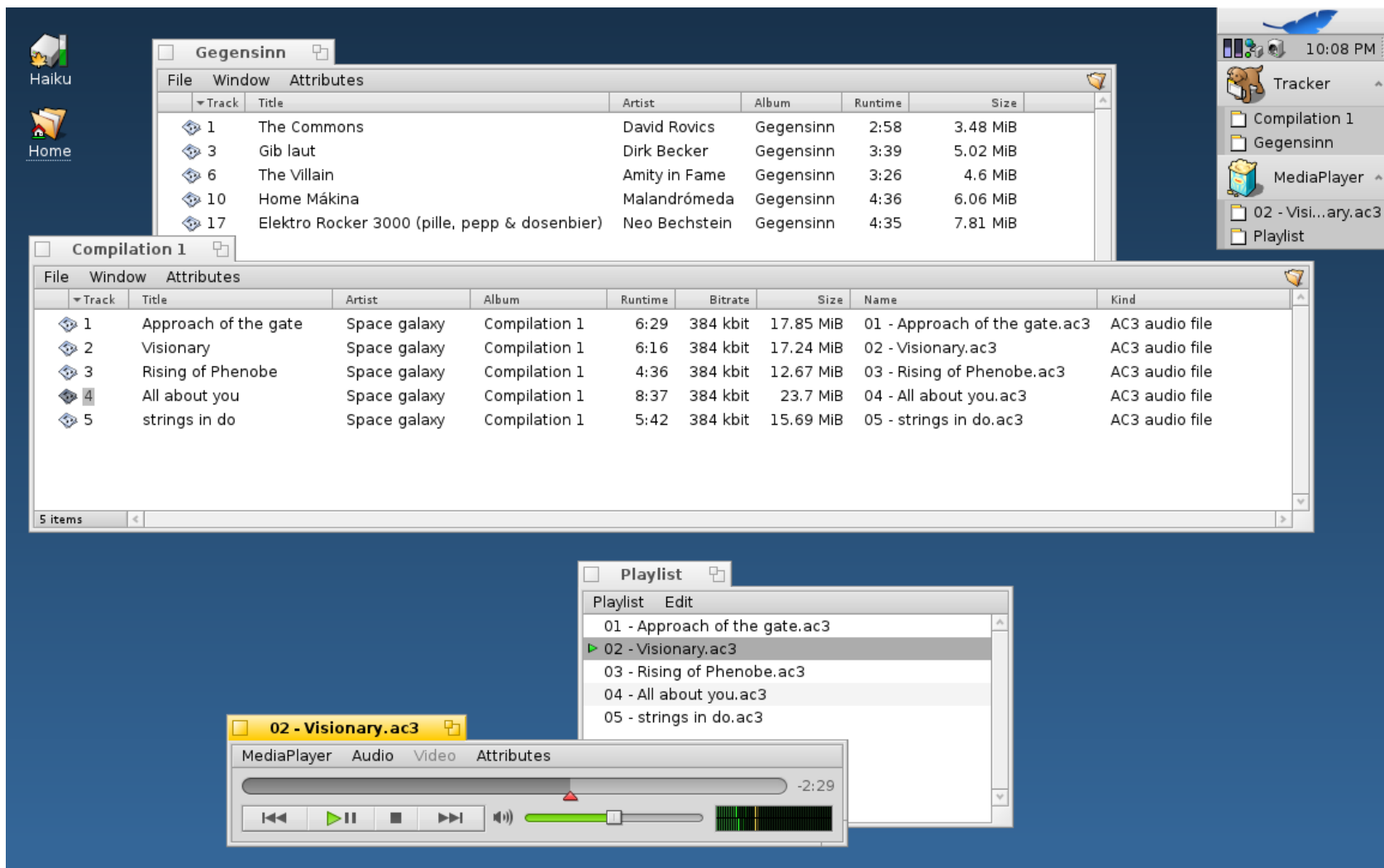


LibreOffice for Haiku

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What is Haiku?

- Open-source, MIT licensed operating system
- BeOS reimplementation
- Goals:
 - Desktop-oriented
 - Maintain binary compatibility
 - Deliver consistent user experience
- Two official “flavors”:
 - GCC2-based 32-bit and GCC5-based 64-bit



Source: https://commons.wikimedia.org/wiki/File:Haiku_OS.png



LibreOffice
But can it run ~~Crysis~~?

What is already out there?

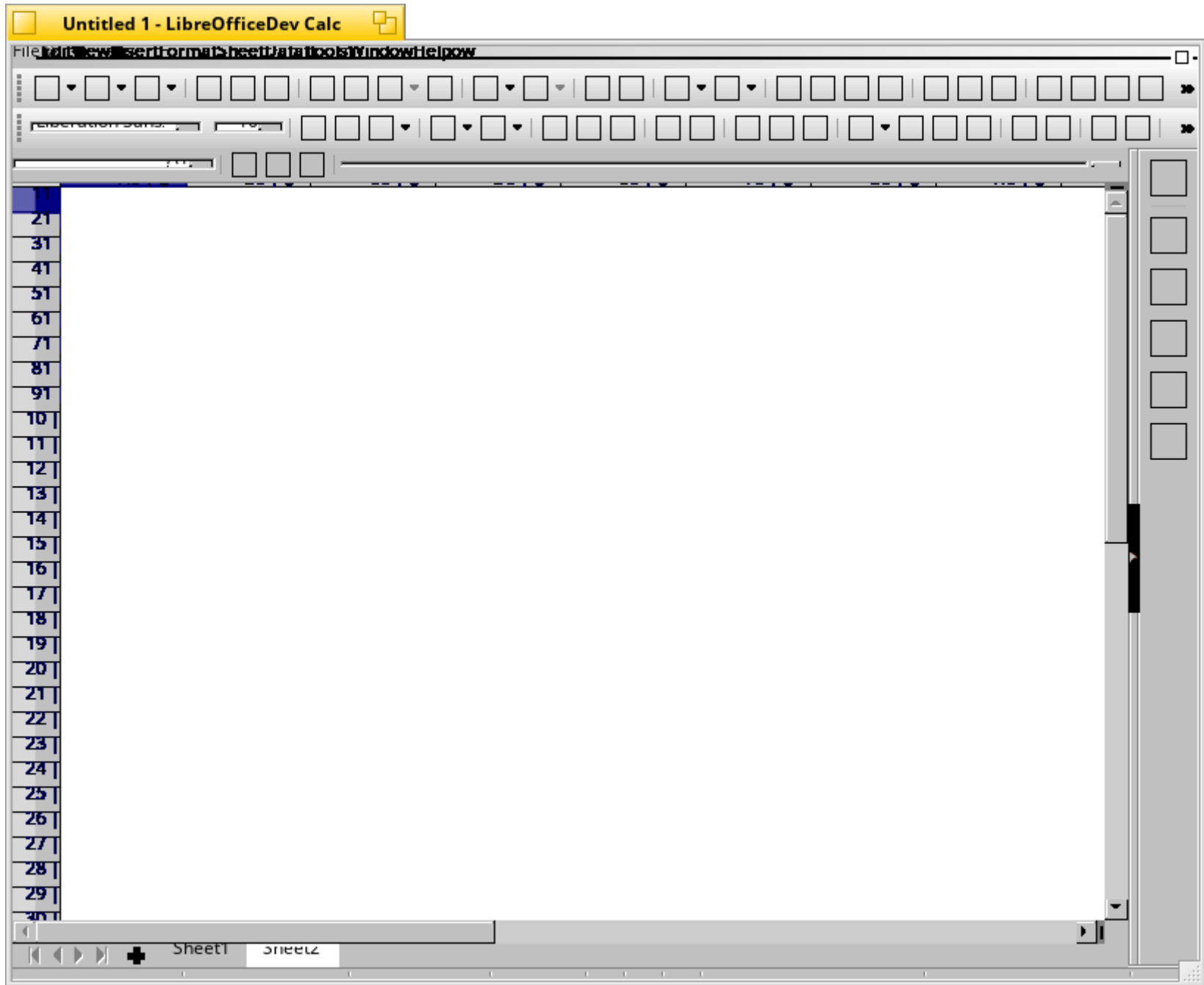
- Desktop-oriented but...
- Until recently office suites for Haiku were lacking:
 - GoBE Productive
 - No source code, runs only thanks to binary compatibility
 - Old (last release around 18 years ago)
 - Calligra
 - Ported recently (Nov 2017)
 - Good enough for most use cases

What is already out there?

- ThinkFree Office
 - License for Java Swing version no longer available
- Some individual apps:
 - AbiWord
 - Port in a bad state
 - SumIt
 - Native BeOS spreadsheet application
 - Scribus

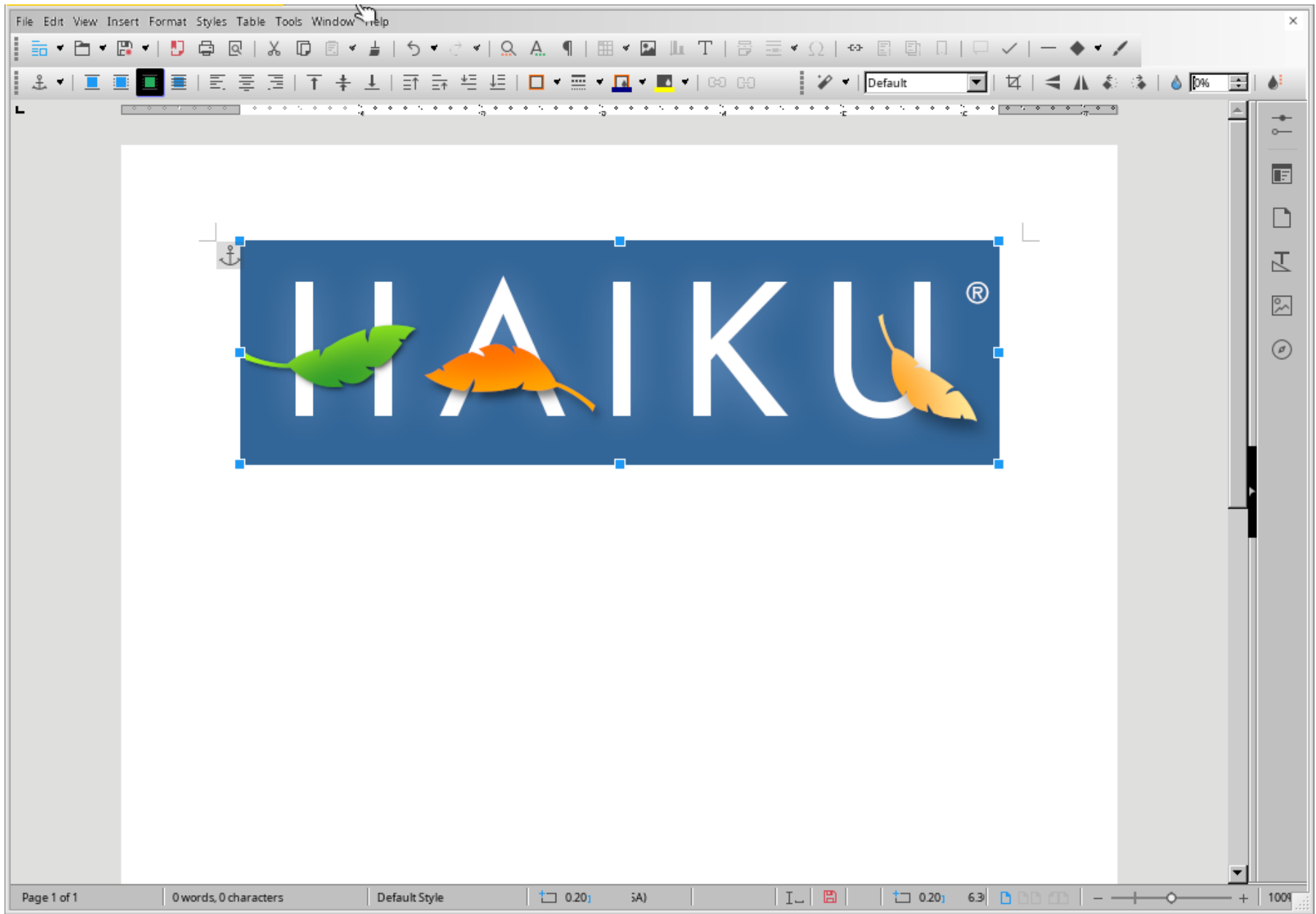
Timeline

- Work started in 2014.
 - Not much achieved, a little hacking on VCL but nothing came out of it.
- Sidetracked until the beginning of 2017.
- Updated base to 5.3.
- First window rendered after two weeks.
- Continued until the end of January, some work done in April.



KDC

- Kernel Debugging Camp (just a name).
- Haiku Coding sprint in November 2017 taking place in Toulouse.
- More work done there in the span of 3 days:
 - implemented window positioning,
 - rewrote rendering backend to be more stable,
 - implemented SalVirtualDevice.



Where's the catch?

- Keyboard input is not implemented.
- Crashes *a lot*.
- Deadlocks sometimes.
- Window updates start from (8,8)?
- Saving a file works, trying to open any deadlocks.

Challenges

- Long turnaround times.
- Some feature switches are unfinished.
- BeAPI's threaded nature.
- Bugs in the system.
- Lots of dependencies.

Porting libraries

- Work happening at HaikuPorts.
- Mostly Document Liberation Project libraries:
 - ./configure; make; make install
 - All of them compiling out-of-the-box thanks to Haiku's POSIX compatibility.
 - One minor exception: libmwaw.
 - Issue: xattr, in Haiku it's in libgnu.so.

Bugs in the system

- Cppunittester crashes on exit.
 - Appears to be a runtime_loader issue.
- TLS is broken?
 - Random crashes, data races perhaps.

Closing thoughts

- Nothing upstreamed yet.
- Easier to do than expected.
- Some code could be reused more. (I think?)
- Easiest part done, now it needs to be stabilized.
- Repo: https://github.com/KapiX/libreoffice_core



Questions?