

0 A.D: Graphics

Graphics problems and opportunities of open-source game



- A little history of 0 A.D.
- Used technologies and how it works.
- Known problems.
- Current solutions.
- Future plans.

0 A.D. (pronounced “zero-ey-dee”) is a free, open-source, historical Real Time Strategy (RTS) game currently under development by Wildfire Games, a global group of volunteer game developers. As the leader of an ancient civilization, you must gather the resources you need to raise a military force and dominate your enemies.

0 A.D. has been in development since 2001 (or 2003, depending on how you count). You can find complete history of the game at:
<https://play0ad.com/about/the-story-of-0-a-d/>.

- Own game engine - Pyrogenesis (written in C++).
- SDL for most OS depended things (IO events, system calls, etc).
- OpenGL 1/2 API for rendering some stuff: *glBegin*, *glEnd*,
- ARB/GLSL for shaders (ARB - 2002).

- Inaccurate hardware information.
- Old OpenGL and slow API functions.
- No modern OpenGL API functions: *glDrawInstanced*,
- Driver or application crashes on Intel cards with particular driver
- Legacy support of OpenGL drivers on macOS 10.14

- Tracker and forum to collect people feedback.
- In-game crash dump and system info that players can upload on our site.
- A feedback server to receive automatic hardware reports voluntarily submitted by players of 0 A.D.

- Find out active audience that really play the game.
- More abstractions to minimize number of places with direct low-level calls.
- Find a low-level third party library or engine for GL/Vulkan/Metal.
- White lists for drivers with bugs (like it's done for Chromium).

Thank you!
play0ad.com

