Games on Linux: Where it's at

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Who are we?

Transgamingicculus.org

What we've been up to

UnrealEngine2Cedega

Unreal Engine

- Highly portable
- Standards based: OpenGL, OpenAL, SDL...
- In use in dozens of Big Name games
- Allows end-user customization
- Make Something Unreal contest



Unreal Tournament 2004



- Windows compatible: loader and API
- DirectX 9 support
- Installers and other evil.



The Good, The Bad, The Ugly

The Good.

The Good

- Most major game engines native on Linux.
- Triple-A titles with more frequency.
- More exploration by Windows developers.
- Server usage beats Win32, client usage beats MacOS X.
- Wine/Cedega filling in missing game gaps.

Driving Forces

- MacOS X as a viable desktop.
- Console wars.
- Need for dedicated servers.
- Growing Linux media buzz.
- Growing end-user demand.
- Ryan and Gav's charming personalities.

The Bad.

Video

• The Biggest, Baddest Game Developer Issue.

OpenGL Drivers

Driver quality varies wildly:

- Nvidia drivers are generally excellent
- ATI drivers are lacking, but improving
- DRI drivers currently have several issues
- Distros may not ship closed-source drivers.

More DRI...

- Lack of pbuffer support in 3D hardware
- Slow ARB_vertex_program
- We get the bug reports and blame.

Nvidia and ATI

- Slow release cycles
- No interest in open sourcing drivers
- No interest in releasing hardware docs
- End-user installation and config is rough

Window Managers

- Fullscreen hints suck.
- New window managers break old games.
- Focus policy has issues, too.

Audio

- ALSA or OSS: pick one, trash the other.
- Artsd and Esound can steal the hardware!

Low Level Stuff

- Lack of pthread_attr_setschedparam()
- CD ejection and notification
- Constant glibc changes
 - Binary compatibility breakage
 - pthreads/NPTL changes
- Exec-shield/prelink

Platform issues

- Package formats, package managers
- Simple, standard way to launch a browser.
- Versions: Silos and Blobs.
- In general: More polish, less new tech.



GCC vs Visual Studio

- Compile times
- Codegen and optimization
- "Fix your code!" mentality.
 - Legacy and one-shot code
 - Let us disable *all* new warnings.

Tree-hugging crap

• Some other things we really need:

- More warm bodies
- More common goals
- Less fragmentation
- Less new "standards"
- More polish, less new tech

Hire Ryan.

- Contract developer.
- Jack of all trades.
- Good, cheap, fast: pick three.
- Service with a smile.

Our email addresses

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