Linux and Indie Gaming

Ryan C. Gordon, icculus.org

Who is this clown?

- Ryan C. Gordon, icculus.org

- Commercial game development

- Platform-independent support

- Open source libraries and tools

- Alternate platforms evangelist, defender of the common man, dirty hippie.

icculus.org

- Open Source Incubator

- Developer support

- Games, libraries, tools

- Specialized in being elitist bastards

- "SourceForge with Soul"

What is Linux?

- Free, open, Unix-like operating system

- Distributed development model

- Historically a "server platform", but...

- ...gaining popularity as a desktop OS.

- Gates: The future is Linux vs. Windows

Some benefits...

- Corporate funding and support, but...

- ...no vendor lock-in or timetable

- Total control over system

- Merit dictates development

- An army of eyeballs

Why is this important?

- International markets growing

- Protection against industry shifts

- Ever tightening school budgets

- Fierce competition between PC makers

- Growing presence in the media

- Linux and Indie philosophies mesh well

10-second history

- Doom

- Abuse

- Loki

- Everything else.

Linux: The Human Face

- Users are passionate

- Users are smart

- Users are demanding

- Users are eager

- Server admins vs. gamers

Validating the Market

- Unreal, Quake, Doom, Torque, Serious

- Everyone's got a server

- UT2004 on the retail disc

- Doom 3 shipping now

- Medal of Honor, ArmyOps, etc.

- GarageGames selling direct to the customer

Some stats...

- Unreal Tournament 2004

- America's Army

- Half-Life/Counter-Strike

- Advertising costs

What's in it for me?

Under-tapped

- Impossible to get complete statistics, but...

- ...350,000 Linspire users!

- Market is vastly under-served

- Need content

- Need variety

Opened Doors

- Unreal Engine:
  - Opteron launch, UT2003 linux/amd64
  - MacOS X version, UT2003
  - Athlon64 launch, UT2004 win64
  - Licensees love Linux support
  - Lots of new, experimental, cool tech

Get Better Tech

- Porting gets you cleaner code

- Porting gets you better abstractions

- Porting gets you complex bug fixes

- Porting gets you less assumptions

- Porting gets you future-proofing

- Porting gets you honest coders

"Honest coders"?!

- What my parents taught me:

- You can't be lazy.

- You can't be cute.

- You can't be dumb.

- Best case scenario: "The Dream Team"

Can this be done?

The Framework Is In Place!

What about DirectX?

- Simple Directmedia Layer

- Input, graphics, sound, threads, lowlevel stuff

- Works great on Windows, too!

- http://www.libsdl.org/

What about Direct3D?

- Use OpenGL!

- Gets you MacOS X, Windows, and Linux

- Why are you locking yourself in?

What about audio?

- All Audio Libraries Suck.

- OpenAL sucks less.

- Simple to use

- Vendor support

- Proven tech

- Open Source, cross platform.

New target, new tools

- GCC
- Valgrind
- OProfile

If it's not bolted down...

- Take advantage of open source!

- Ogg Vorbis

- Speex

- zlib

- libpng

- Never trust middleware without source.

Milk the community

- Linux Gamers' FAQ: http://icculus.org/lgfaq/

- linuxgames.com

- slashdot.org

Hire me.

- Game development, game porting

- A whole network of hackers

- We will not be undersold!

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