The multi-platform philosophy
How to develop under Linux and to sell for Windows

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Introduction

Write once
build everywhere
Requisites

- Multi-thread
- 2D GUI
- 3D GUI
- Socket
- Database
- Language
- Compiler
- Performance library
- SWAR support
S.O. (SW) multi-platform

SOURCE CODE .obj .o

COMPILER

API

SOURCE CODE

API
ISA (HW) multi-platform

liğin

.LINKER

.ISA

.ISA
Multi thread

Hand-made wrapper

Open Thread (OSG)

Pthread

http://sources.redhat.com/pthreads-win32
Database

- MySQL
  - http://www.mysql.com

- Berkeley DB
  - http://www.sleepycat.com

- MS Access
Performance library

Intel C compiler
http://www.intel.com/software/products/compilers

ATLAS
http://math-atlas.sourceforge.net

To compile under Windows see:

Makefile

SCONS
http://www.scons.org

Cmake
http://www.cmake.org

PERL script
http://www.perl.org
My choice

- C + ASM
- Pthread
- SDL
- OSG
- BerkleyDB
- ATLAS
- Hand-made socket wrapper
- SCONS
Alternative

- **Java**

SLOW – SLOW – SLOW:
Why do not you write an O.S. with Java?

- **Cygwin**
Linux → Windows

(Not fully free)

- **Wine**
Windows → Linux

(Not direct API)
GNU Libtool - The GNU Portable Library Tool
Originally by Gordon Matzligkeit, 1996.

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Introduction

GNU libtool is a generic library support script. Libtool hides the complexity of using shared libraries behind a consistent, portable interface.

To use libtool, add the new generic library building commands to your Makefile, Makefile.in, or Makefile.am. See the documentation for details.

Availability

The latest official stable release is available via ftp from your nearest GNU mirror. Download instructions and a list of ftp mirror sites are here.
Advantages

- Fully portable
- Direct API
- ISA fully supported
- Gcc
- Cross-compiling
- FREE for commercial use
BEOWULF CLUSTER CESENA
• Cluster AMD Athlon: 4 x Dual Athlon MP 1,55 GHz 384 KB cache L2 1 GB ram 12,4 GFlops

BEOWULF CLUSTER BOLOGNA
• Cluster IBM: 2 x Dual Xeon 2,6 GHz 512 KB cache L2 2 GB Ram 10,4 GFlops

HIGH PERFORMANCE 64 BIT ARCHITECTURE
• Dual Opteron: 1,6 GHz 1 MB cache L2 2 GB RAM 5,6 GFlops
Twilight ‘OC’ Team

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THANKS FOR YOUR
ATTENTION!

Any question?

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