

Java™ Gaming

Speakers

- ◆ Panelists
 - ◆ **Doug Bell**, FTL Games
 - ◆ **Joshua Bell**, DimensionX
 - ◆ **Bob Troia**, ICon CMT Corp.
 - ◆ **Wayne Holder**, FTL Games
- ◆ Moderator
 - ◆ **Miko Matsumura**, JavaSoft, Sun Microsystems, Inc.



Java Games

Doug Bell, FTL Games

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Current Limitations with Games in Java

- ◆ Poor sound support
- ◆ Lower performance
- ◆ No direct access to hardware
- ◆ Missing support for input devices
- ◆ The sandbox

Features of Java Important to Games

- ◆ Networking
- ◆ No porting (well, someday)
- ◆ User extensibility keeps games alive
- ◆ HTML
- ◆ Instant access through browser
- ◆ Did I mention networking?

Networking Games

- ◆ Multiplayer is King
- ◆ Uniform and high-level networking API
- ◆ Technology is invisible to user



Java Games Don't Require Porting

- ◆ Porting game to platforms is expensive
- ◆ Most games traditionally limited to a few platforms
- ◆ Eventually, uniform APIs will decouple hardware from software

Extensibility Keeps Games Alive

- ◆ Dynamic binding is like plug-ins on steroids
- ◆ Longer “shelf” life with open architecture
- ◆ Online editors
- ◆ Networking allows sharing of user extensions and creates interest

HTML and Games

- ◆ HTML can be part of the game
- ◆ Provides a rich environment for auxiliary material
- ◆ Allows for distributed gaming environments



Instant Access

- ◆ Games are an impulse product
- ◆ Capture attention and hold it
- ◆ Games as a marketing vehicle
- ◆ Interactivity *is* games



Doing Cool Stuff Now

Wayne Holder, FTL Games

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Java Advantages for Game Development

- ◆ Rapid Prototyping
 - ◆ Custom editors are easy to add
 - ◆ Modular development
- ◆ Built-in Error Checking
- ◆ Dynamic Binding
- ◆ Java is really a dream language for games

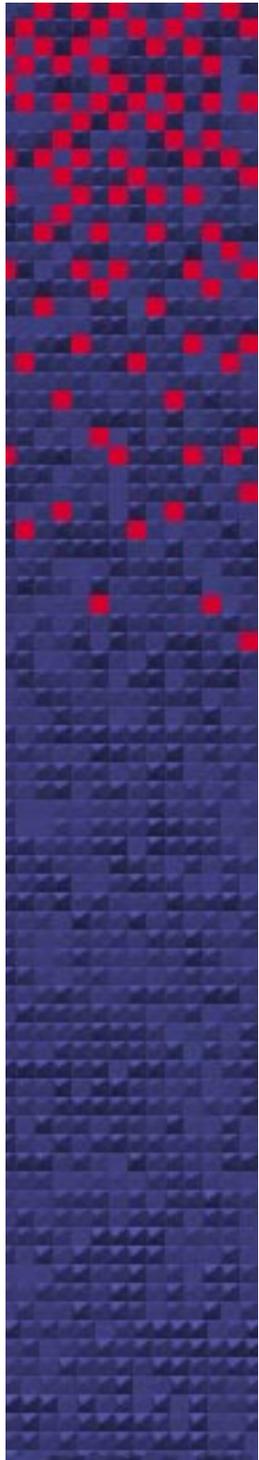
[Yes, but Isn't Java Too Slow?]

- ◆ Speed is relative
- ◆ JITs are closing the gap
- ◆ APIs are native

Pushing the Envelope

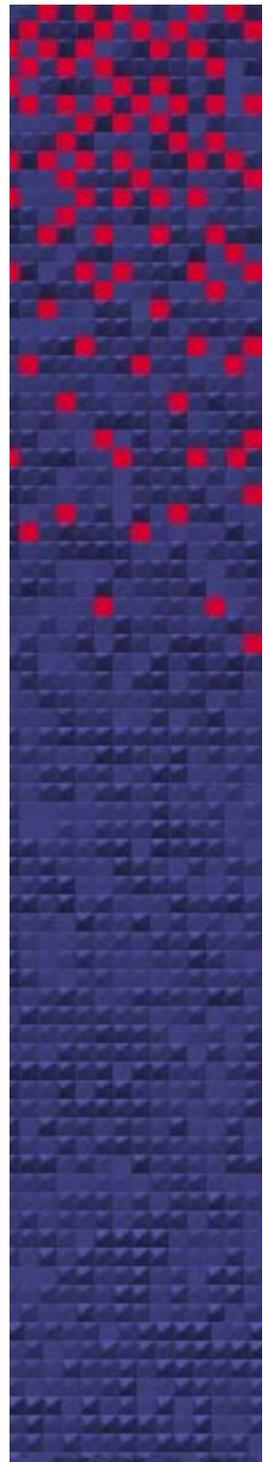
Demos

- ◆ Fractal Planet
 - ◆ 800,000 fp muls, 300,000 fp divs, 100,000 fp sin, cos, etc. per frame
- ◆ Splatt Ray Casting Engine
 - ◆ 9 fps at 240x140 on 100 MHz PPC 601 (Power Mac 7500)



Q & A





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