

Project Darkstar

Putting the “Massive” in Massive Multiplayer Games

Chris Melissinos
Chief Gaming Officer
Sun Microsystems, Inc.

introduction

- Chief Gaming Officer
- @ Sun for 14 years
- husband
- father
- technologist
- hardcore gamer

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Custom arcade
Pong arcade
Atari 2600
Intellivision
Colecovision
Atari 5200
Atari Lynx
Game Gear
GameBoy
GameBoy Advance

GameBoy SP
NES
SNES
Nintendo 64
GameCube
Wii
Nintendo DS
Nintendo DS Lite
Coleco Ranger
Vectrex

NeoGeo
TurboGrafx-16
Sega Genesis
Sega 32X
Sega Saturn
Sega Dreamcast
Playstation
Playstation 2
Playstation 3
XBox

XBox360
Sony PSP
3DO
Atari Jaguar
Jaguar CD
TurboGrafx CD
Wonderswan Color
NeoGeo Pocket Color
Pole Position Cabinet
VirtualBoy

how have you
stayed married?

bit babies

(or “generation pong”)

- born in the dawn of the computer age
- computers were new and mysterious
- emergence of a new “language”



what's happening?

- gamers raising gamers
- barrier to games and computers approaching zero
- multi-mode communication
- kids are finding their own voice through games and social sites
- drivers of new technology adoption are 5 - 14 years old



online video game stats

- expected to reach \$11B globally by 2011
- biggest markets are Asia, North America, Europe
- fastest growing segment of \$40B video game market
- casual multiplayer online video games is biggest market opportunity
- women over 35 are the largest segment

technology snapshot

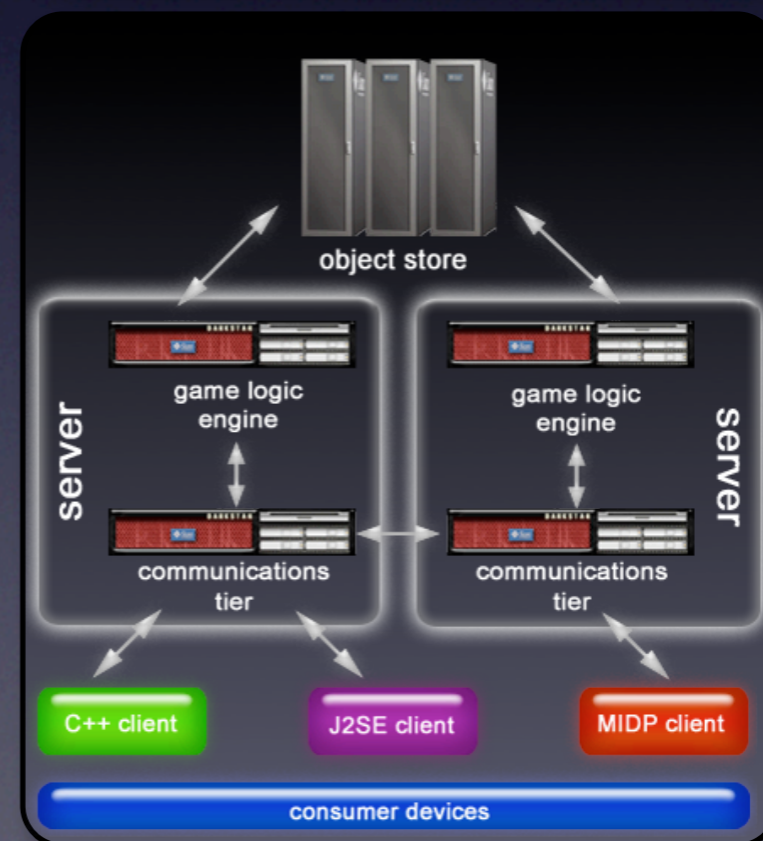
- server technology designed per game
- driven by game design
- not built for scale
- rebuild almost everything all of the time
- unstable

what's the problem?

- 10,000 players is not massive
- “shards”? Don't know, don't care
- game developers are not network engineers
- it's not sexy, but is **critical!**
- building online games are \$30+M investment
- extremely high rate of failure
- big companies only (well...mostly)

Project Darkstar

- designed for massive scale, persistence and transaction integrity
- game & client agnostic
- designed specifically for online video games
- “shardless” design
- written in JSE
- open source - GPLv2



developer benefits

- highly pluggable - easy to integrate into tool pipeline
- simplified programming model
- faster iterations
- masks multi-thread/processor/machine
- common across all possible devices
- remove burden of developing a server platform and just focus on gameplay

business benefits

- supports multiple client devices and languages
- stimulate new gameplay services and frameworks
- relieve the operational burden of the datacenter
- fund multiple projects simultaneously
- allow small companies to compete
- complete reuse of infrastructure investment

community benefits

- projectdarkstar.com
- \$0 cost of entry
- information resources
- open source
- community contributions
- “the smartest people don’t work for you”



Project Wonderland

- virtual world collaboration
- leverages standards
- shared apps
- shared workspace
- remote control of real world objects
- open source



our goals

- help the video game industry to grow
- leverage open standards
- build strong community and collaboration
- share enterprise solution experience
- open the market to new ideas
- level the playing field for new content and experiences to emerge

thank you!

chris.melissinos@sun.com

www.projectdarkstar.com