



Second Life

(Don't sell your First Life just yet...)

By James Reynolds

What is SL?

- "Second Life is a 3-D virtual world entirely built and owned [hmm...] by its Residents. Since opening to the public in 2003, it has grown explosively and today is inhabited by a total of 8,687,234 Residents [**cough**] from around the globe." - *secondlife.com*
- Mix of WoW and TSO (The Sims Online)

Client Application

- Supported platforms
 - Windows XP (not Vista)
 - Mac OS X
 - Most Linux distros
- GNU General Public License v2
 - Not all of the code is released though

Linden Labs

- Privately held company in San Francisco
 - Named after a street...
- CEO Philip Rosedale (former CEO of Real Networks)
- About 140 employees
 - 28 are engineers

Emphasis

- 3D content creation and scripting
- Economy
 - Buying clothing, buildings, weapons, etc.
- Socializing
 - IM, voice chatting
 - Parties, dancing, "escorts"
- Exploring
- Gaming? Well... it isn't WoW

Membership Cost

- No cost to become a "resident"
- Buying things costs "Linden Dollars" (L\$)
 - Buy L\$ w/ real \$\$, "earn" L\$ or upgrade to "Premium" membership
- Premium membership
 - \$10-\$6/month depending on length
 - Required if you want to "own" land
 - Land costs are extra

Who Uses it and Why?

- "Virtual Utopians"
 - The "perfect" you
 - Tend to spend their real money
 - A bit more realistic and responsible
 - Love to use voice chat

Who Uses it and Why?

- "Role Players"
 - Be anything you want
 - No-commitment relationships & "safe sex"
 - Hate voice chat
 - Do not put their own money into the game, but instead "earn" L\$

Who Uses it and Why?

- A lot of Europeans use Second Life, Germany, Netherlands, UK, etc.
- Brazil has its own "grid"
- There is also a Teen grid
- Gender population is maybe 50/50
 - Maybe 15% of women avatars are men
 - Maybe 5% of men avatars are women

Real Lives of Residents

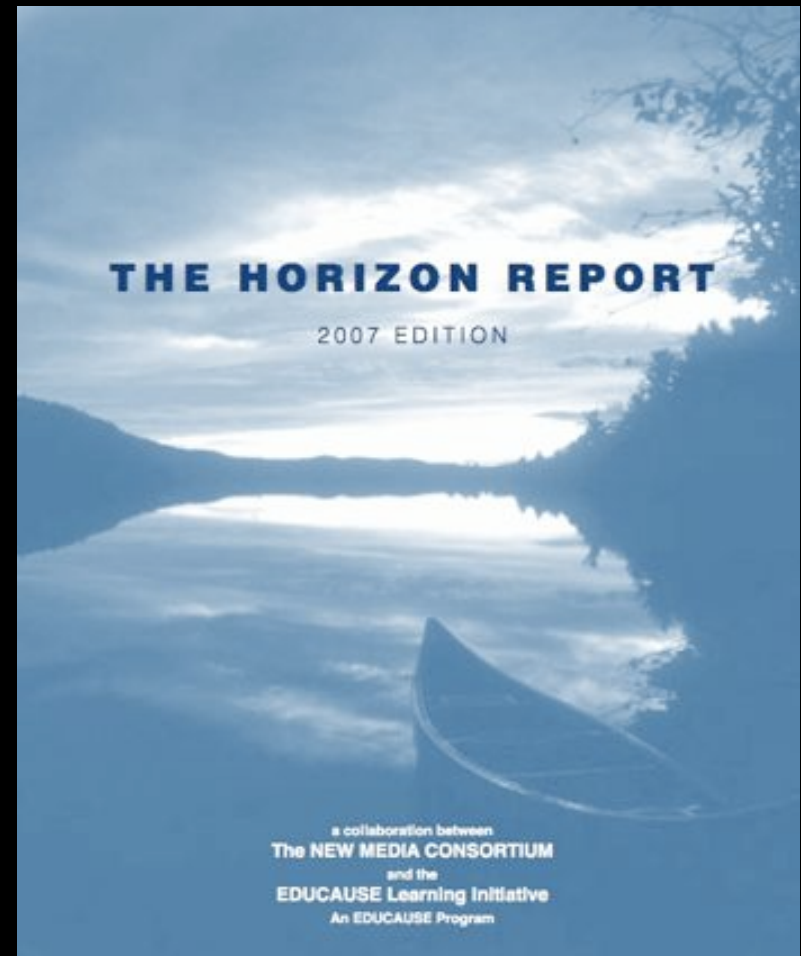
- I've met
 - Programmers
 - Real estate agents
 - Corporate lawyers
 - Nurses
 - Students
 - Home makers
 - People who attend church in SL...
 - Etc.

Sub Cultures

- Sex, "cybering", SM, "child play", slavery, etc...
- Star Wars, Vampires, Furrries, Goreans
- 19th century "steampunk" Caledon
- Music (U2, Susan Vega, Duran Duran, indies)
- Politics/activists
- Businesses (IBM/AMD/Dell/Sears/Toyota/etc)
- Many universities
- Etc.

Education in SL

- Educause and New Media Consortium's 2006 and 2007 Horizon Report highlight Second Life
- 2-3 years for adoption



Education in SL

- There are many Universities with land in SL
 - Harvard, Stanford, Ohio U, Pepperdine, Rice, NYU, Huston, at least 60 more...
- Visual learning (architecture, etc.)
- Learning a language
- Distance education
- I'm sick the phrase of "learn by role playing"

Obvious Positives

- A few people make a very real living there
- Very social
 - Tiny barrier to make friends
 - Good for recruitment
 - People do what they wish they could in RL

No NPC's

- There is "a human behind every player"
 - Why SL is better than webpages
- Anonymous, but with a persona
 - Perhaps this is why SL IM is easier than normal IM

Problems

- Sex/Porn/Nudity everywhere
 - There are "Mature" and "PG" areas
 - No visual divider, so you can see the neighbors' porn even if you are PG land
 - Half of "quality" content is on mature land
 - Who enforces this anyway? I've seen porn on PG land...

Problems

- Bugs
 - Massive "resident" discontent
 - Linden Labs keeps adding "bling"
 - Voice chat and better visuals
 - Never fixes bugs
 - Client app constantly crashes
 - Lost inventory (\$\$\$)
 - Teleport broke
 - Search broke
 - Etc.

Problems

- Legal
 - LL needs age verification, but will it come?
 - Gambling was just banned in July
 - LL has a bad TOS... they are currently in court because of it
 - They can "freeze" or "dissolve" assets. Who ****really**** owns anything there?
 - UK is looking into taxing SL profits

Problems

- Outages
 - Many are pre-announced
 - Some are unexpected and can last all day
- Can be expensive to host content
 - "Island" costs \$1675 then \$295/per month
 - 50% off for education
 - Linden Lab's earns \$ from Land sales

Problems

- Malware and "griefers"
 - Script DoS, orbiting avatars, disrupting events, etc.
- Abuse enforcement
 - Where are the cops?
- Closed Server (client is open source)
- Their servers were hacked in Sept 2006

Problems

- Overstated "resident" numbers
 - 8 million users, but only 1.6 have actually logged in in the last 2 months (many people have multiple accounts--I have 4...)
- All digital content resides on LL's servers...
- Caters to big business
- Slow to deal with trouble tickets

Problems

- The "grid" is very expensive compared to other online games
 - Linden Labs says it pays for itself
 - But the company is not making a profit
- 100,000 max users (40,000 actual max)
- Search function is often out of date

Problems

- Some areas are creepily empty...
 - There needs to be some sort of draw otherwise residents think the place is no good and it stays empty
- It is possible to copy "uncopyable" objects
 - SL intellectual property "theft"
- Some businesses are pulling out
 - Wells Fargo

Problems

- The client app is updated sometimes weekly and is a 200 MB download...
- Copyright and trademark isn't enforced
- Some say SL economy is a pyramid scheme
- Someone has actually filed a real police report that they were raped in SL

What is Going On???

- Second Life & other virtual worlds are a hit
- Nobody really knows what this means
 - Too many residents have "drank the punch" and can't give an objective opinion
 - The economic aspect first excited then soured businesses and entrepreneurs

What is Going On???

- Whatever happens, virtual worlds are too appealing to enough people willing to pay real \$
- Virtual worlds will be a part of the future and by extension, education
- But nobody really knows what form it will take

The "Grid"

- The "grid" consists of over 2000 servers running Debian OS & Mysql
- Each "sim" (an island) is a single process
- Generally one process per CPU core
- It is possible to crash a sim with user created scripts or bring it to a standstill with game engine physics problems

Physics

- Uses the Havok physics engine
 - Gives objects physical abilities (roll, push)
 - Used by many games and 3d apps
 - Half-Life 2
 - Halo 2
 - 3ds Max
 - Adobe Shockwave

3D Content Creation

- Types of content
 - 3d geometry (primitives)
 - SL client app (& Maya plugin)
 - Image maps (texture maps)
 - GIMP/Photoshop
 - Avatar animations (the dancing)
 - Poser/Avimator
- Currently 34 terabytes of user created data

Scripting

- Linden Scripting Language
 - C/C++, Java, PHP like
 - HTTP and XML Remote requests
 - Being ported to Mono
 - 1000 times faster than current version
 - Will allow programming in C# and VB

Media

- Quicktime
- Icecast music
- Only land owners can set media URL's

Demo

- Movies
- If grid is online...
 - IBM
 - Ohio
 - Etc.

