

How it works (and how it doesn't)



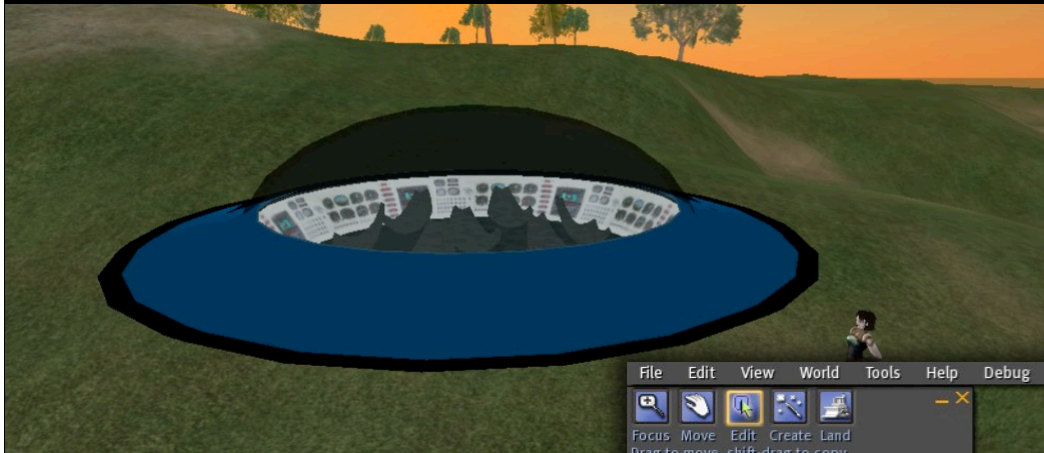
**SECOND™**  
**LIFE**

# What is Second Life?



(It's like first life, but you can fly.)

# You can make your own stuff...



File Edit View World Tools Help Debug God C55WL South 147, 203, 34 (Mature) - Cory Linden's Land 8:06 PM 1528,062

X: 155.000 Y: 209.000 Z: 33.834

Focus Move Edit Create Land  
Drag to move, shift-drag to copy

- Position  Use Grid [Options...](#)
- Rotate (Ctrl)  Stretch Both Sides
- Stretch (Ctrl-Shift)  Stretch Textures
- Select Texture
- Edit linked parts

Ruler Mode: World [Less](#)

General **Object** Content Texture

- Lock
- Physics
- Temporary on rez
- Phantom

Building Block Type: Sphere

Cut Begin and End: B: 0.65 E: 0.85

Hollow: 90

Hollow Shape: Default

Twist Begin and End: B: 0 E: 0

Dimple Begin and End: B: 0.35 E: 0.90

Material: Wood

Position (meters)  
X: 155.000  
Y: 209.000  
Z: 33.834

Size (meters)  
X: 1.137  
Y: 1.354  
Z: 2.326

Rotation (degrees)  
X: 0.00  
Y: 0.00  
Z: 240.00

# ...and write your own software...

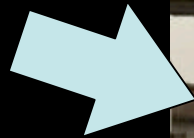
The screenshot displays a software development interface. On the left, a file browser titled "New Script..." shows a list of files, with "Pilot Verification Script" selected. The main area shows a code editor with a script titled "Script: Pilot Verification Script". The code includes comments and function calls such as `llListen`, `llSetTimerEvent`, `llAvatarOnSitTarget`, `llGetStatus`, `llSleep`, `llSetStatus`, `llSitTarget`, `llStopAnimation`, `llReleaseControls`, and `llResetScript`. A "Script: Pilot Verification Script" window is overlaid on the code editor, showing the same script content. The interface also includes tabs for "General", "Object", "Content", and "Texture", and a "Undo Changes" button at the bottom.

05  
16



... so it's certainly not a game  
(or a "site").

World



Avatar



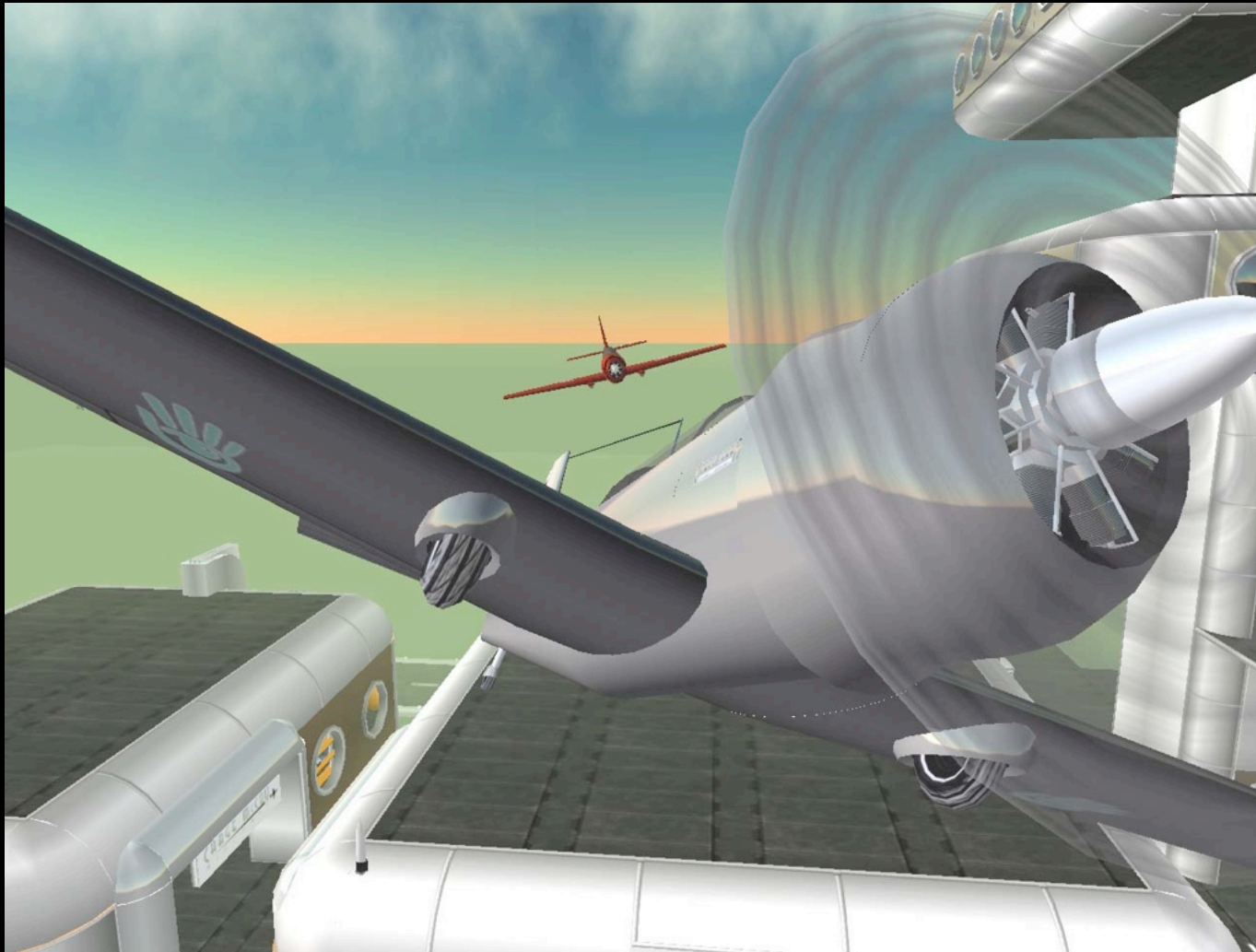
Game



Collaborative creativity  
is the killer app...



...but what do people DO  
in Second Life?















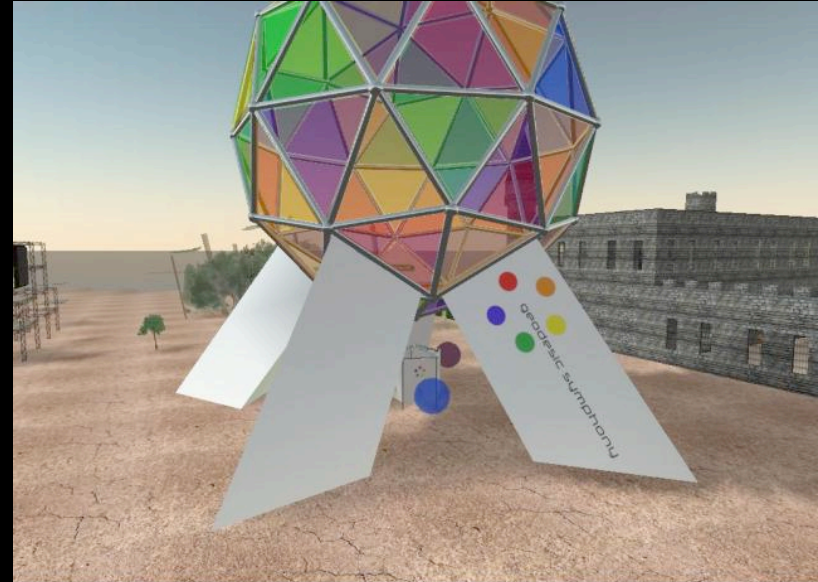














**REMEMBER**



**ONLY YOU  
CAN PREVENT GRAY GOO**

**NEVER RELEASE NANOBOT ASSEMBLERS  
WITHOUT REPLICATION LIMITING CODE**

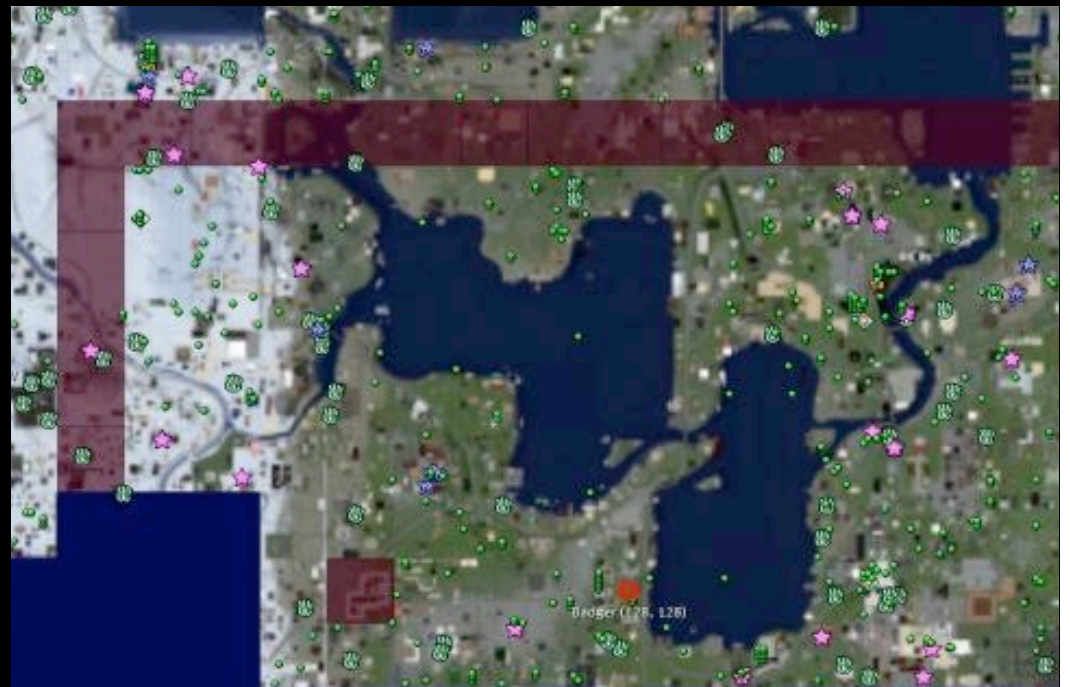
[www.modernmonkey.com](http://www.modernmonkey.com)

# Cut a hole in the world to stop the goo

Grey goo



Firebreak



# One server re-compile later:



(We've subsequently installed space lasers and replication fences)

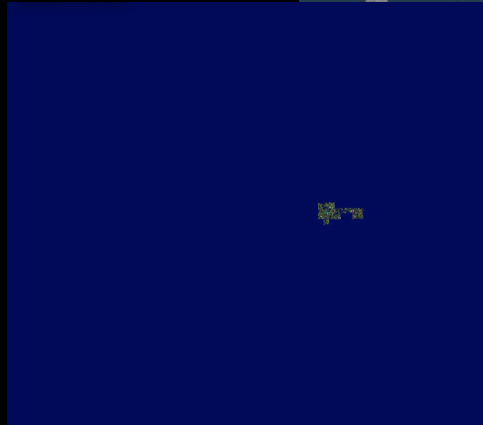


Back to our regularly scheduled  
program...

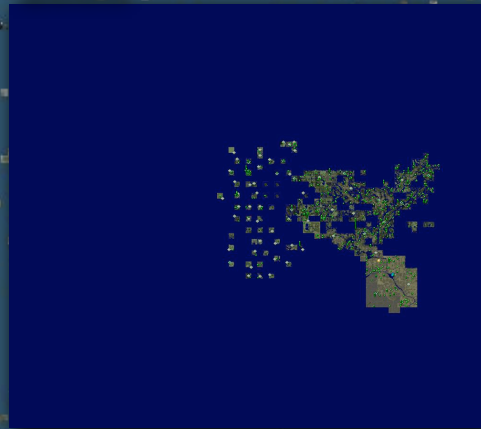
2007

SL is pretty big

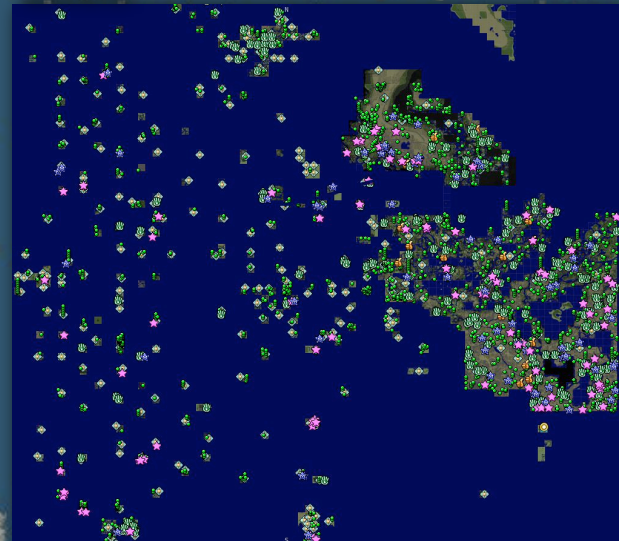
2003



2005

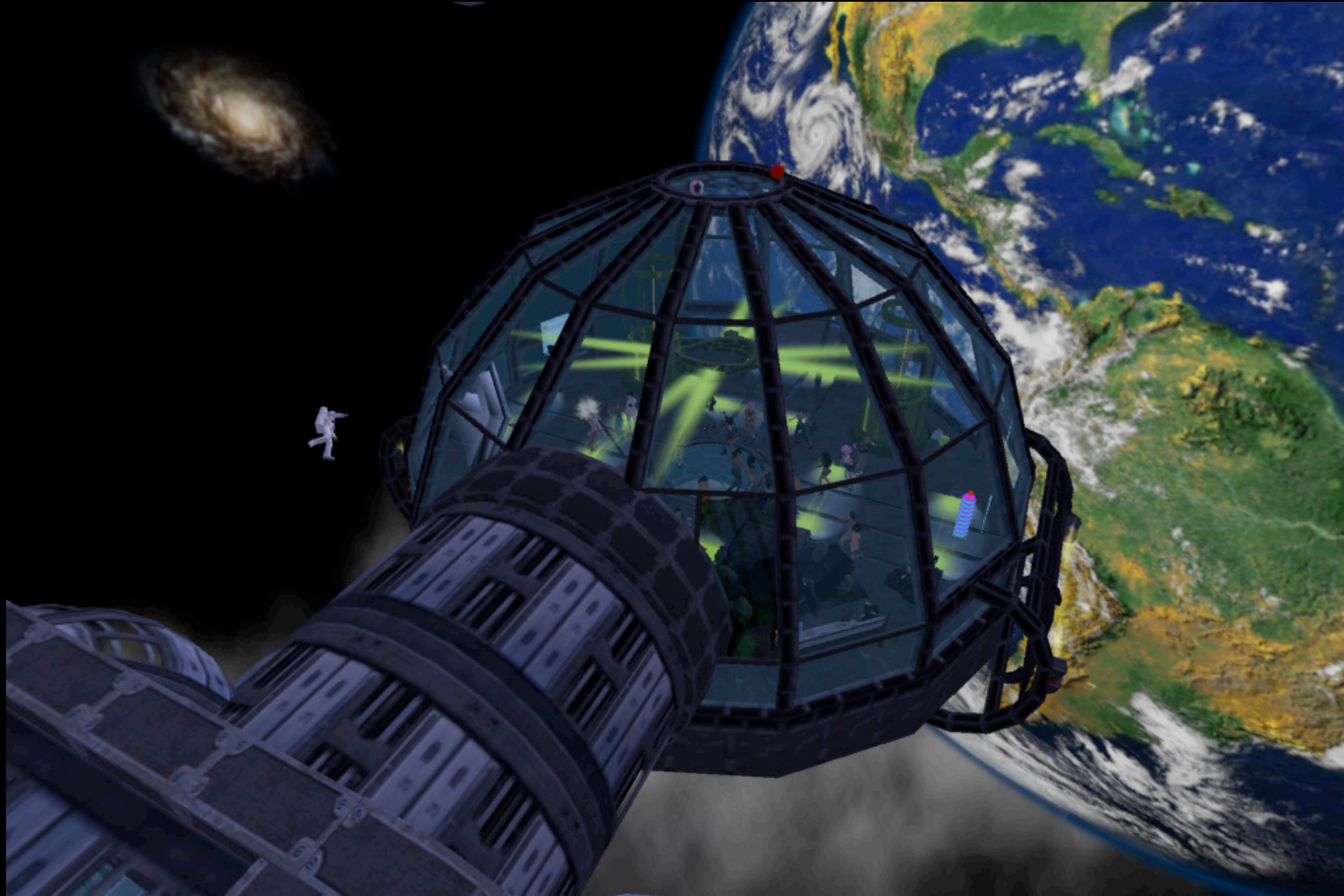


2006



15,400 simulator processes  
956 square kilometers = 8X San Francisco  
~100 TB (over 1bn files) of user-created content  
30 million concurrent scripts

# How it works, today and tomorrow

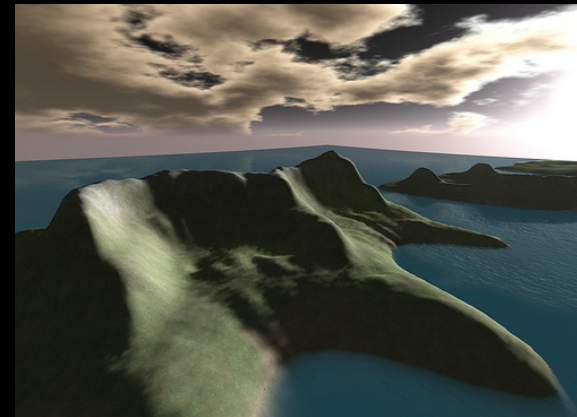




SL (the software) has two primary components: Viewer and Simulator



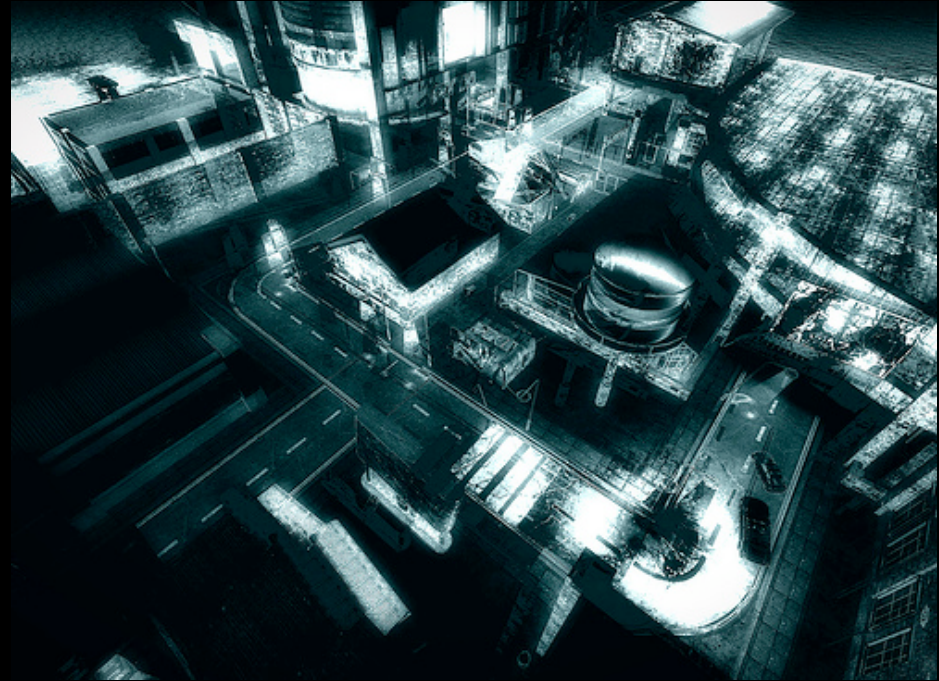
**A user's PC**



**A Linden Lab server**

# The simulator

- **Monolithic C++ application**
- **Linux**
- **15,400 concurrent sims**
- **Fixed 256m x 256m size**
- **Havok Physics**
- **LSL Scripting**
- **Visibility Calculation**
- **Scene compression and streaming**
- **Closed source**



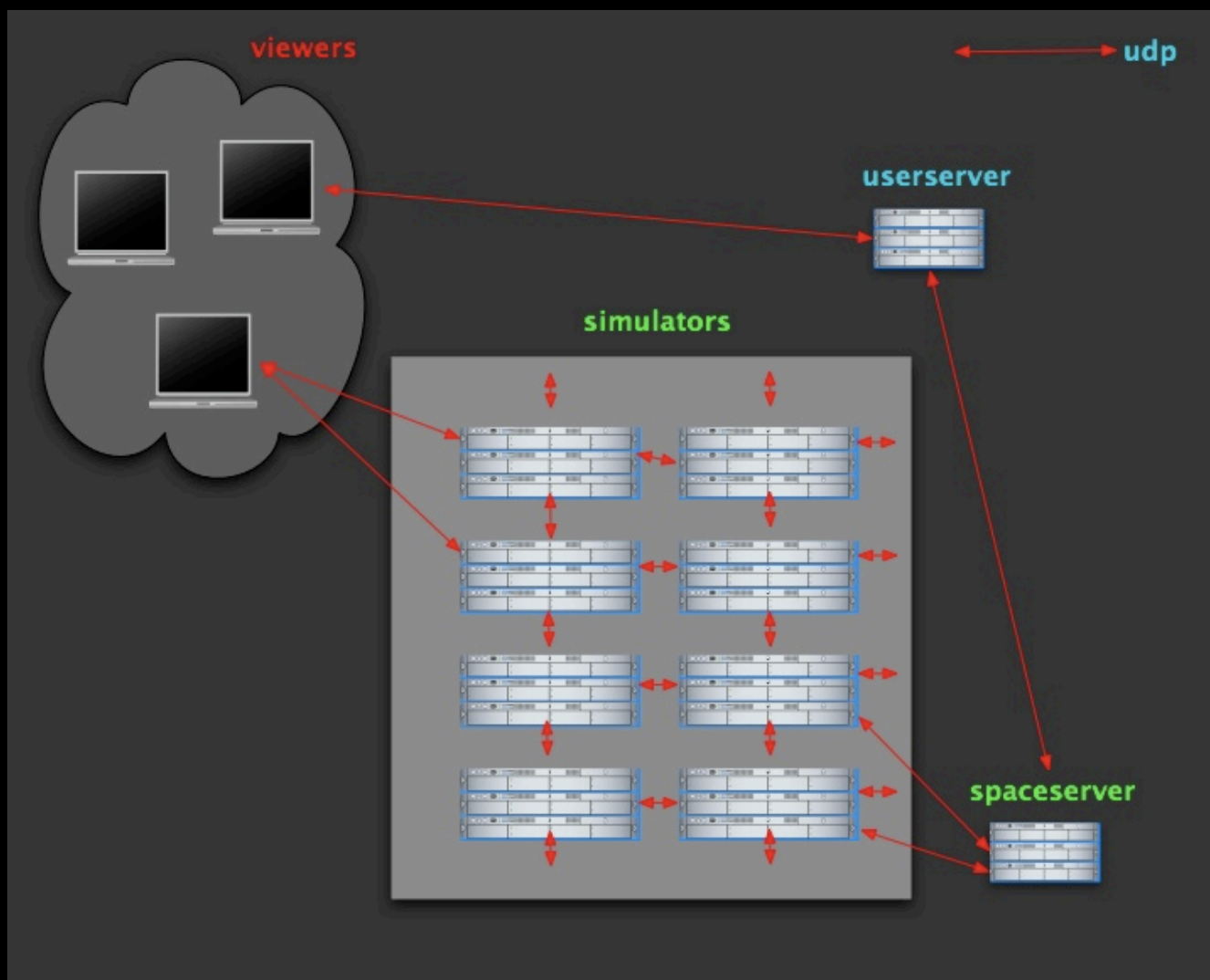
# The viewer

- Monolithic C++ application
- Windows, Mac OS X, Linux
- 50,000 concurrent viewers
- Creation tools built-in
- No client scripting
- No plugins
- Open source!

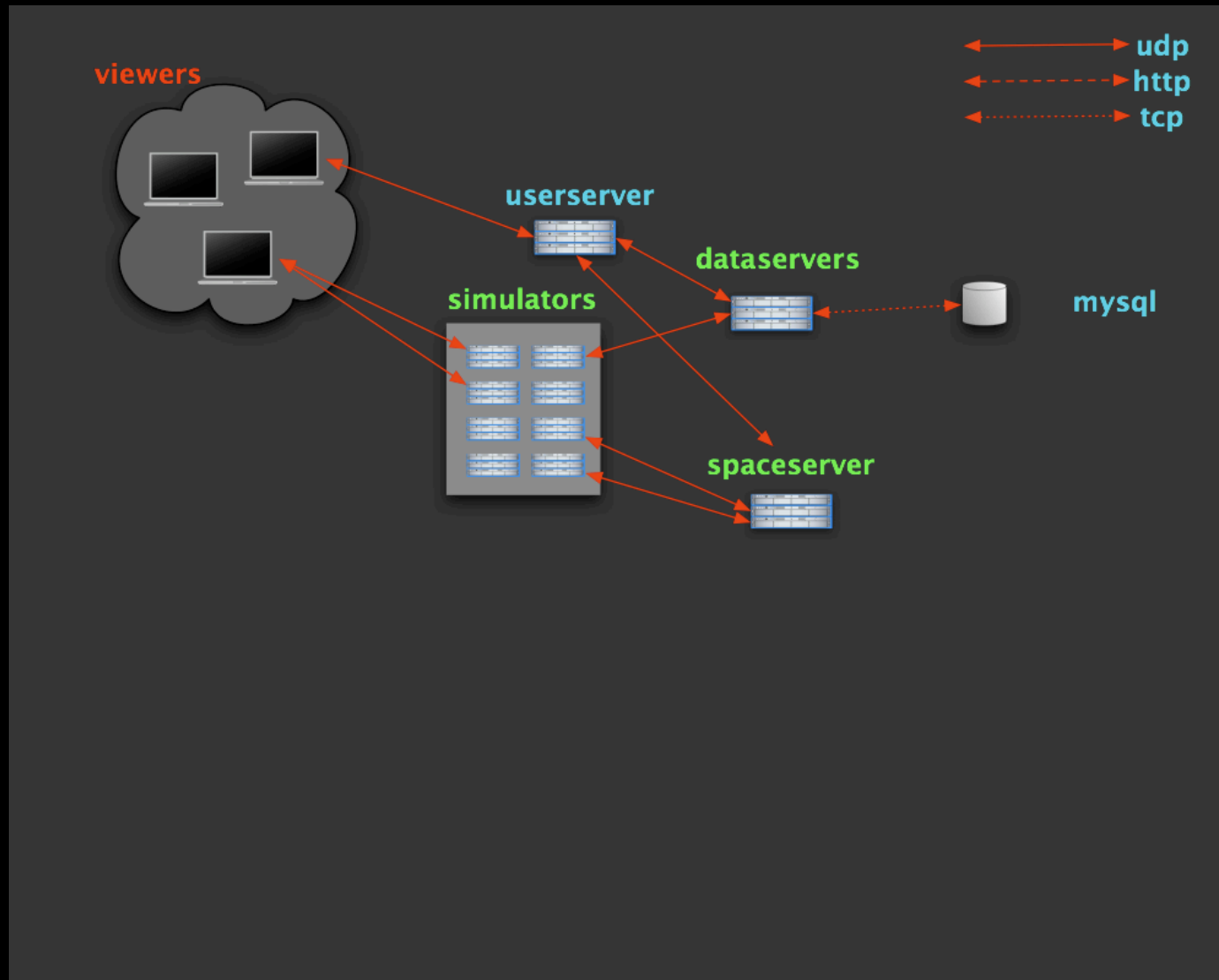


**BTW: go download the code!**

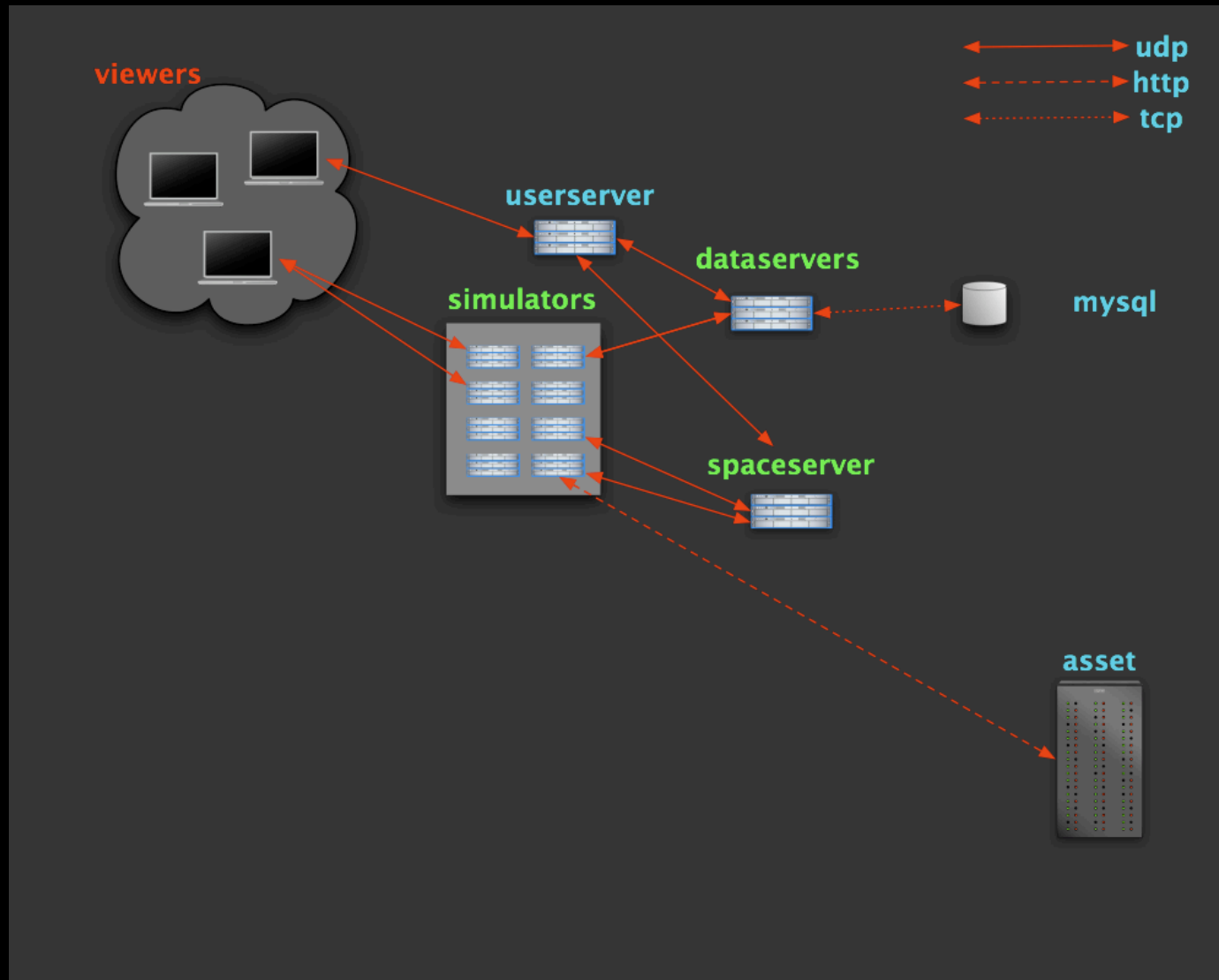
# A simple plan



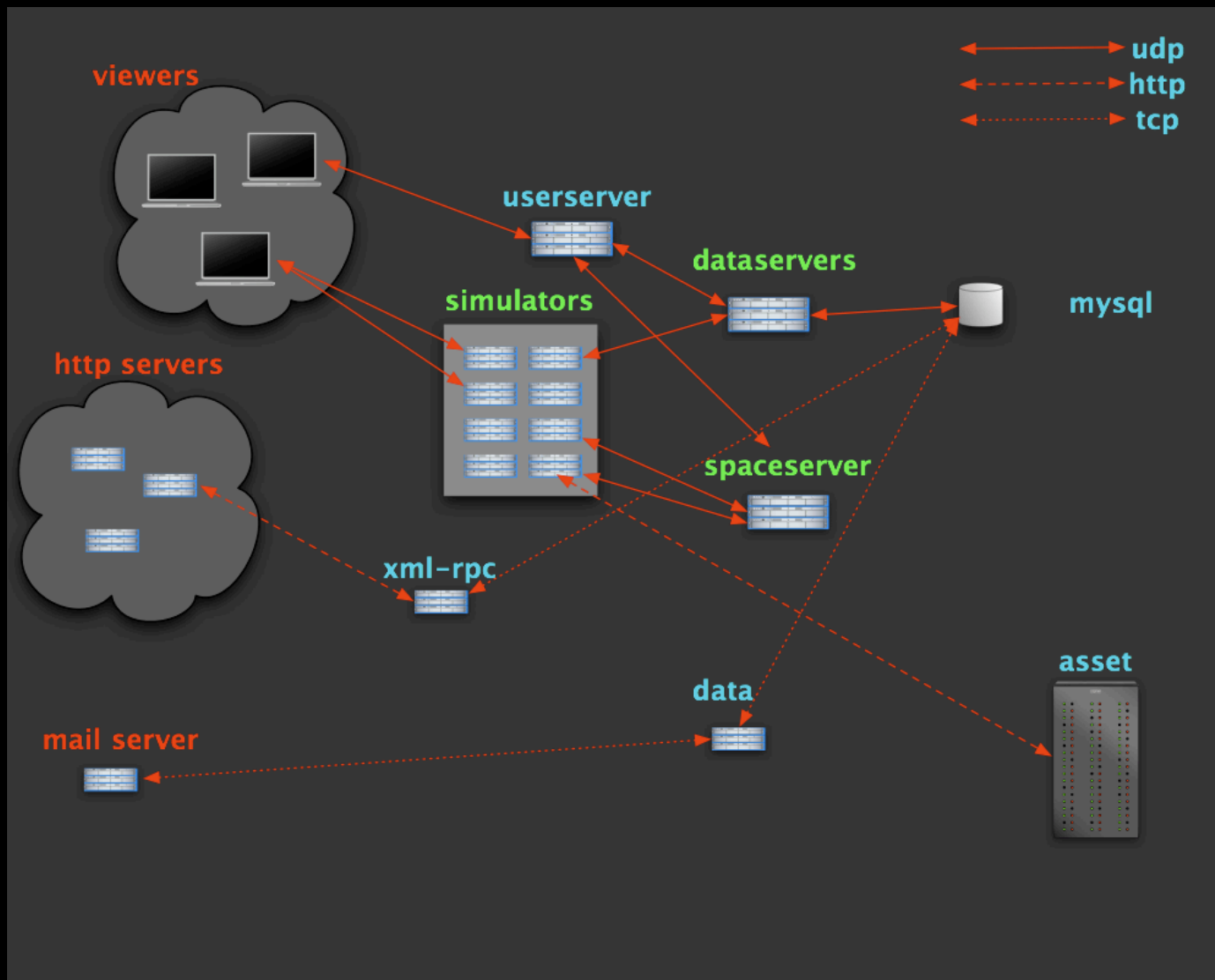
# ...with global data



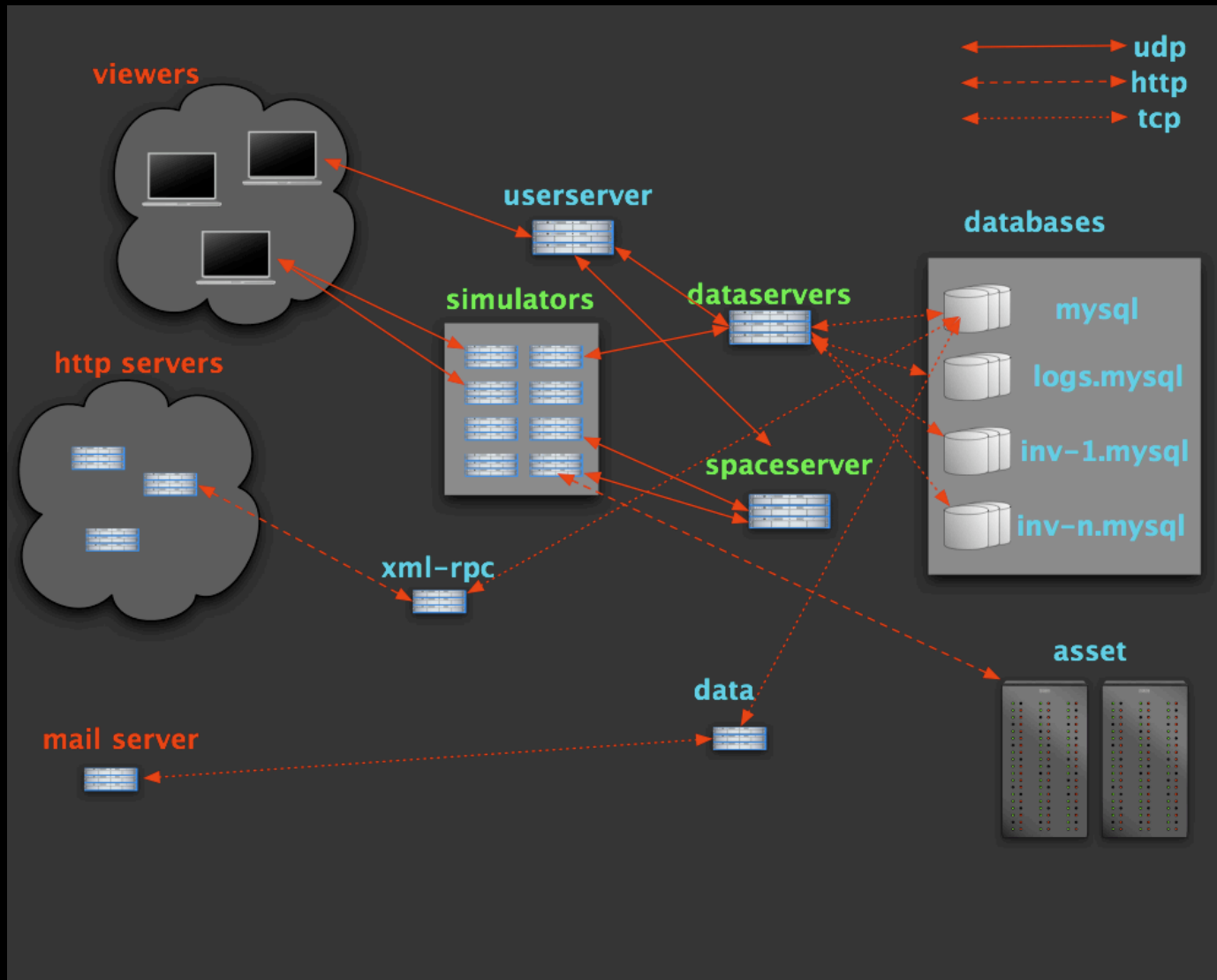
# ...and permanent storage



# ...and external communications

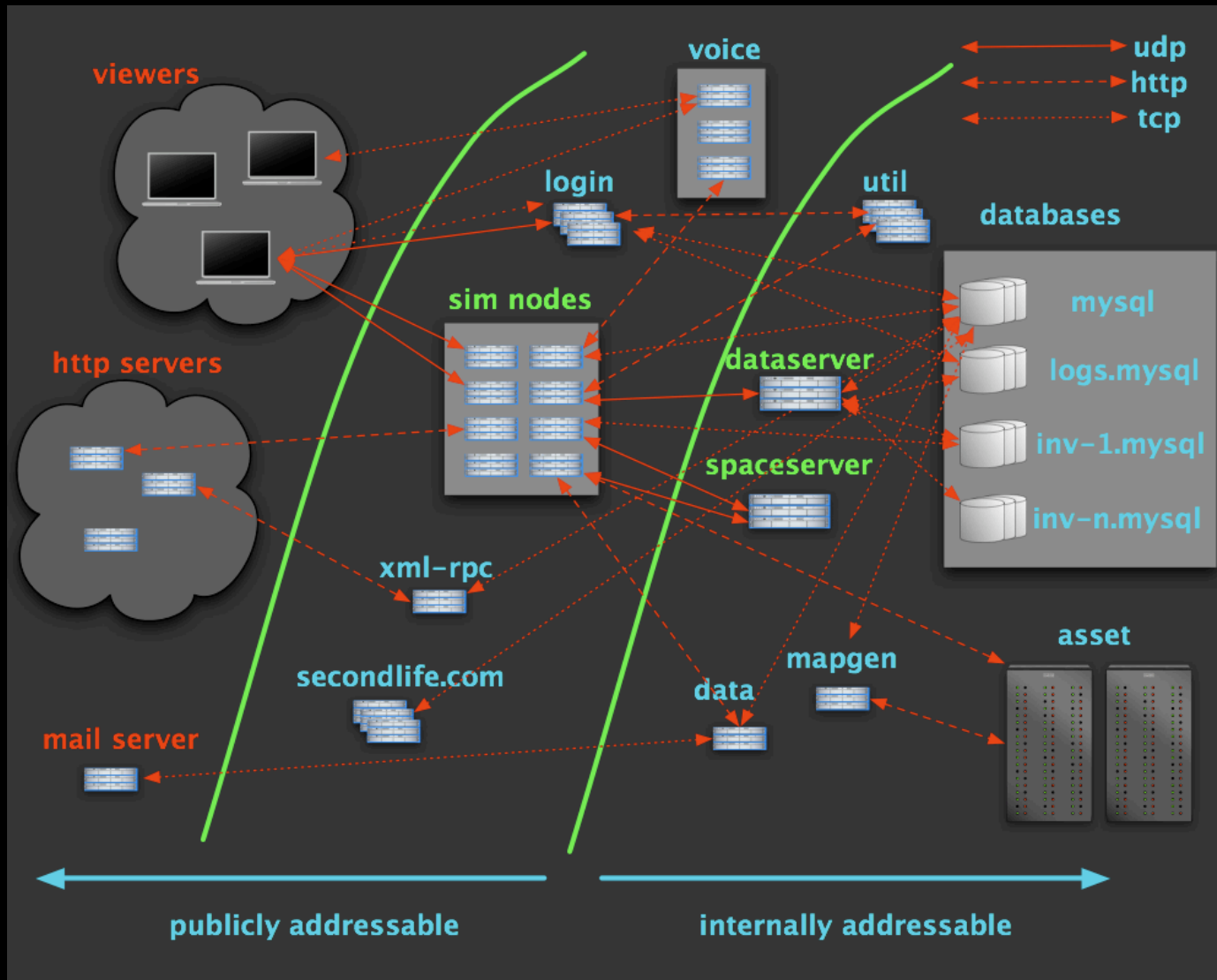


# ...and it needs to scale

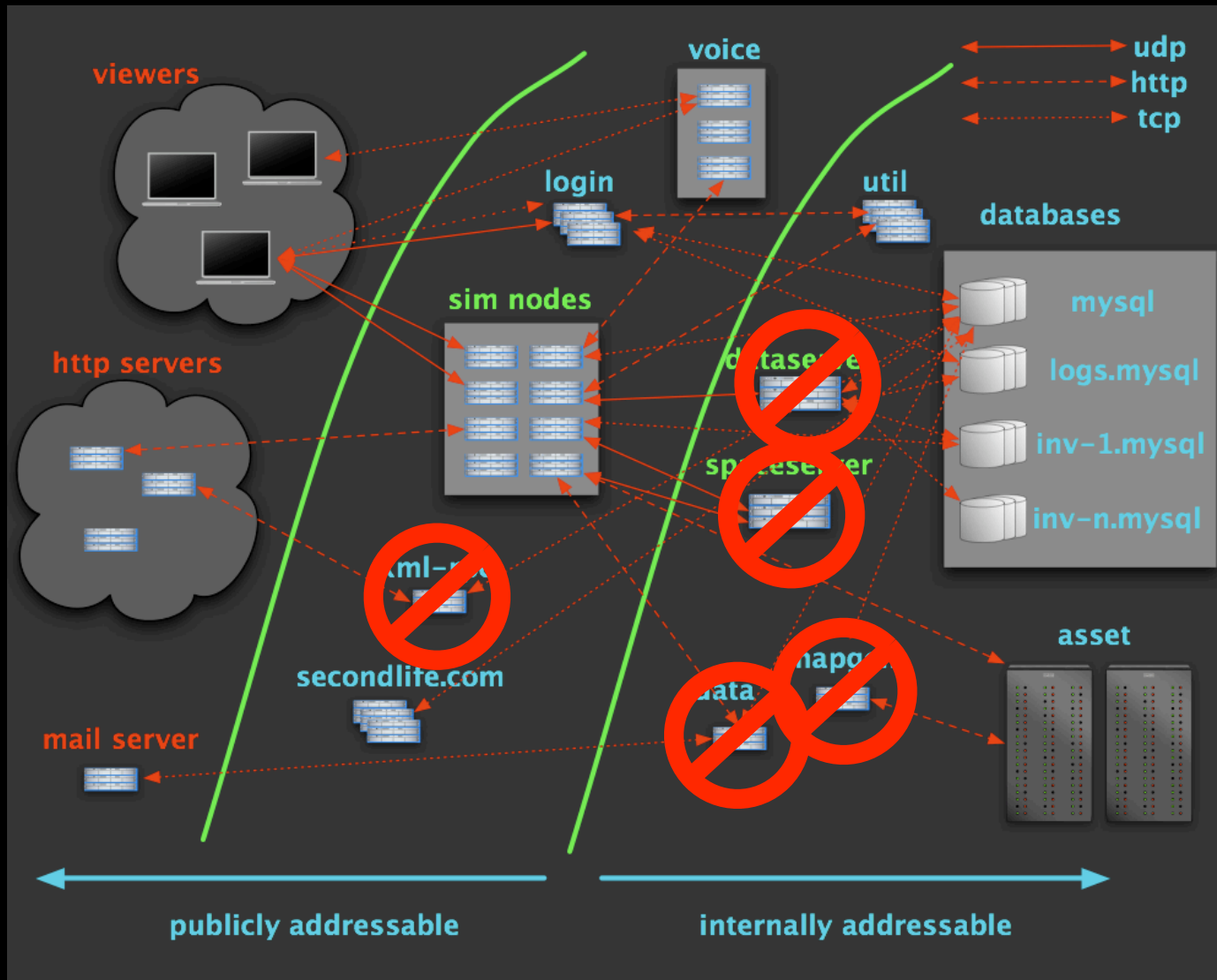




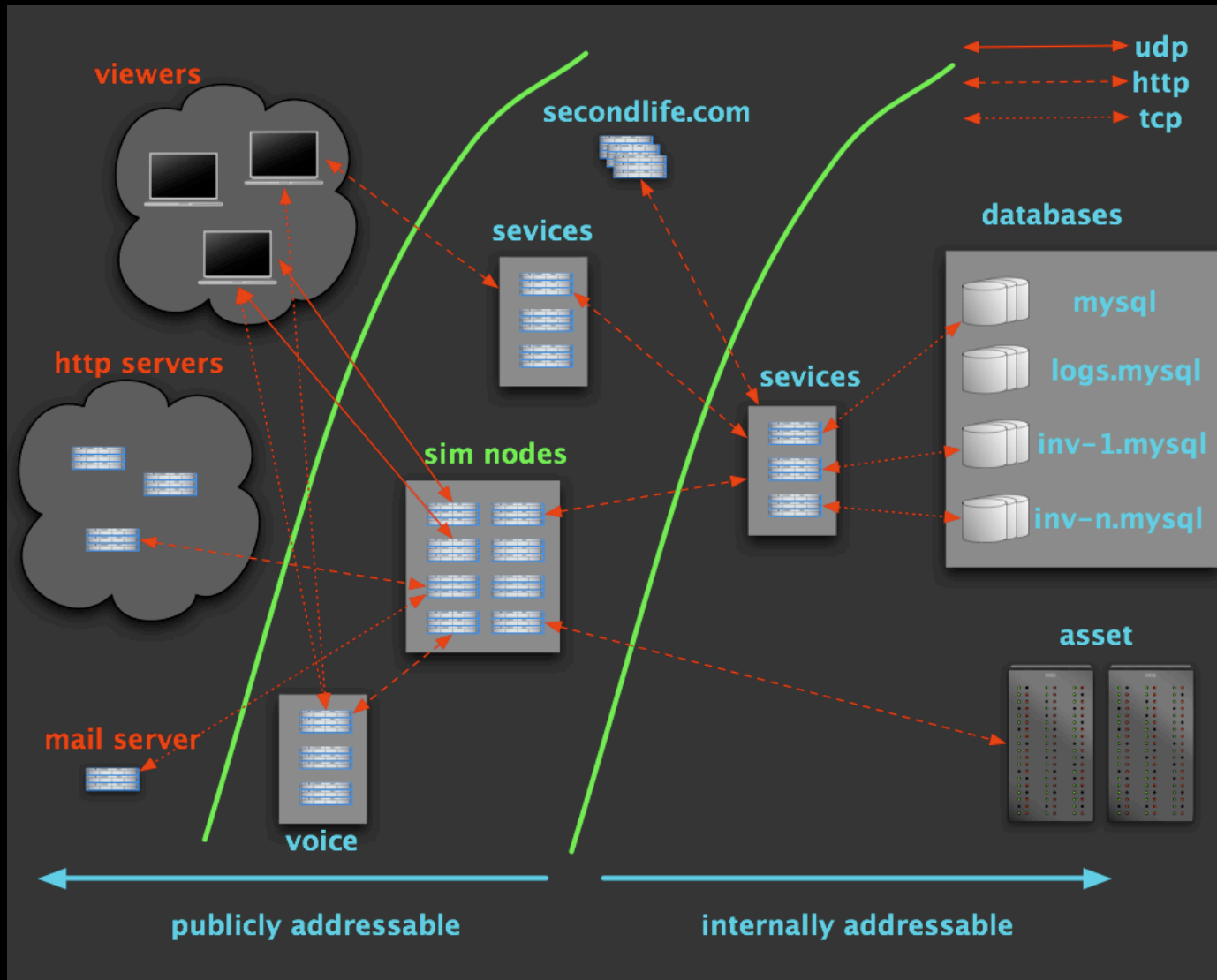
...so not really simple, OR a plan



# Legacy components



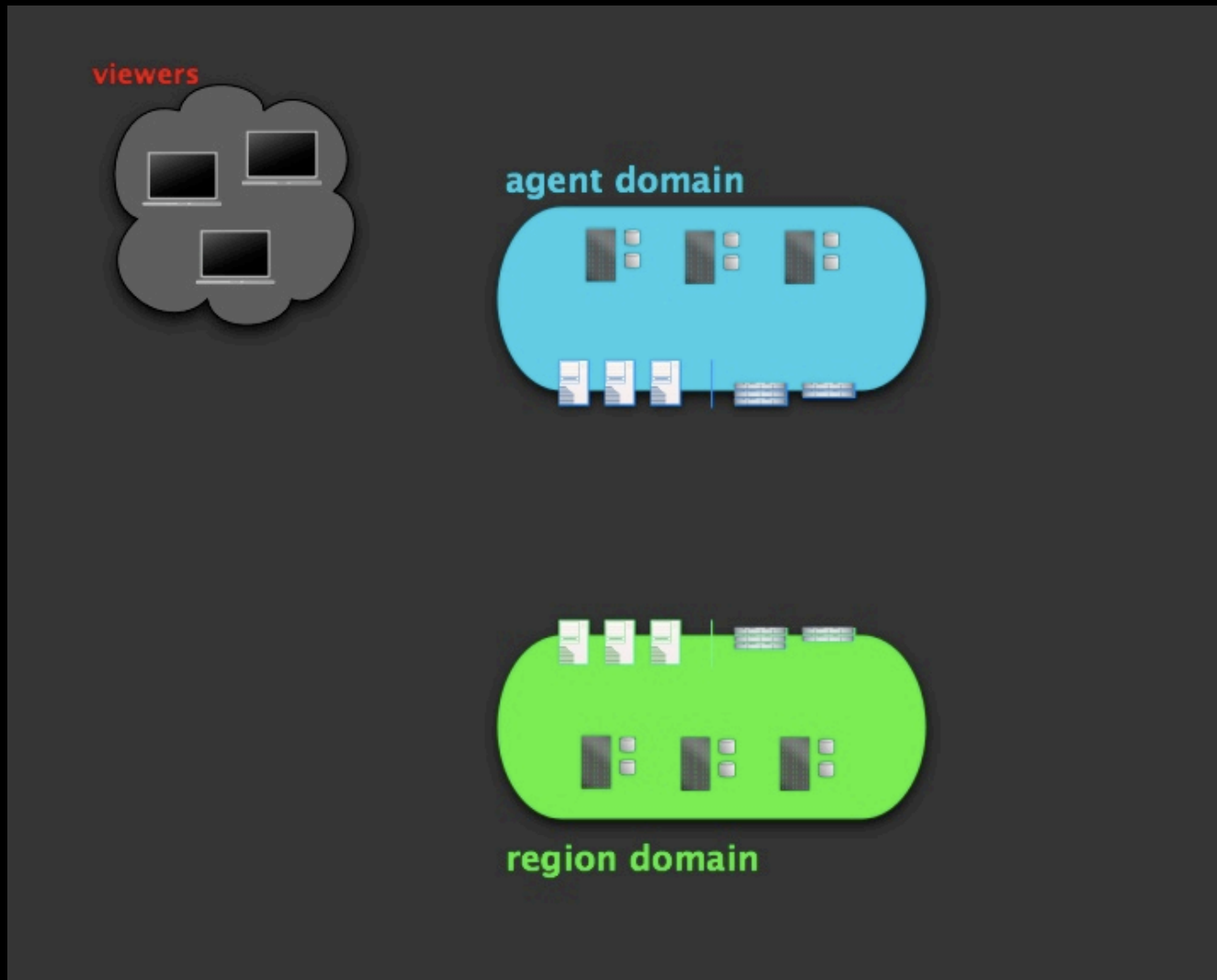
# Time to modernize



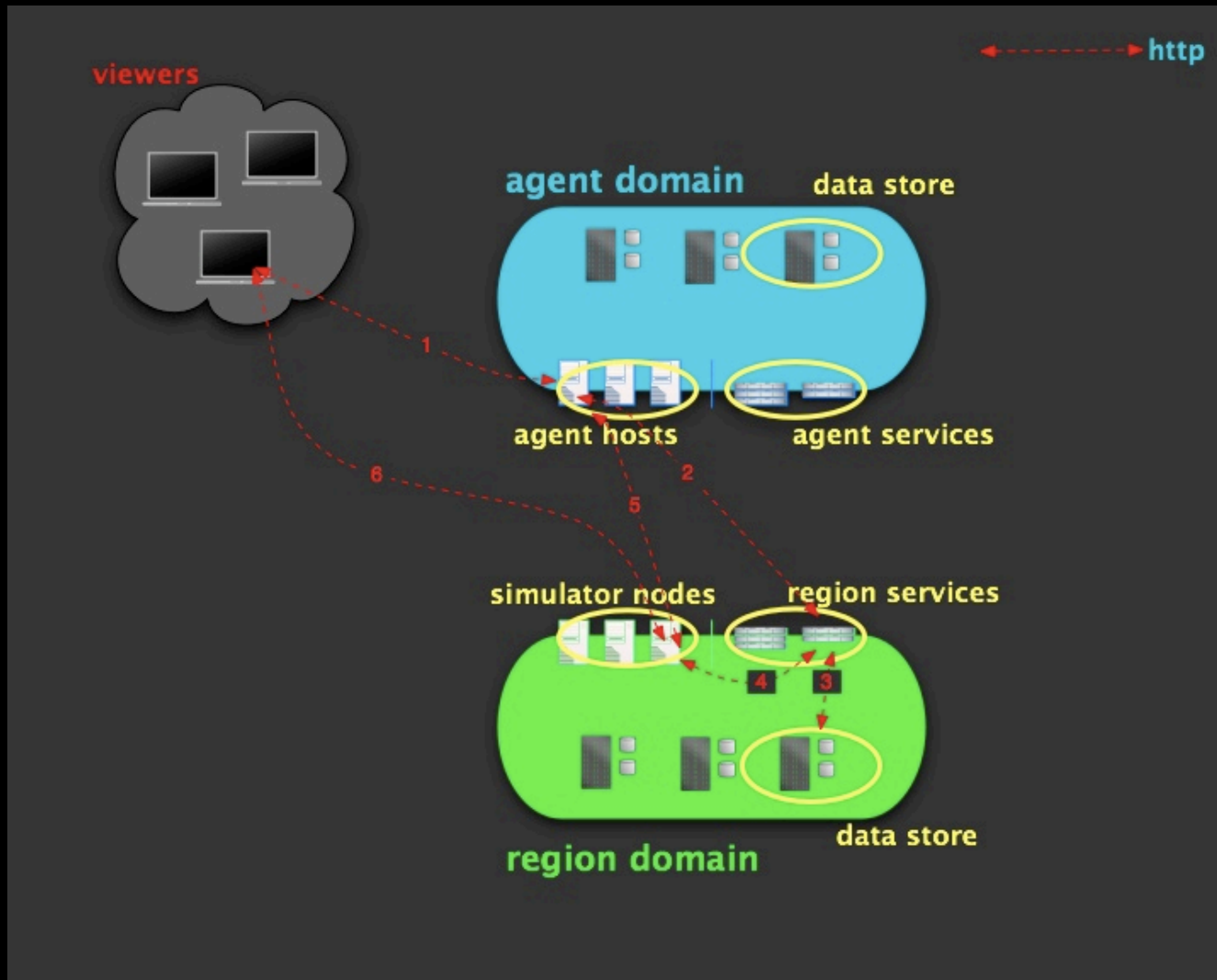
(Ponder...)



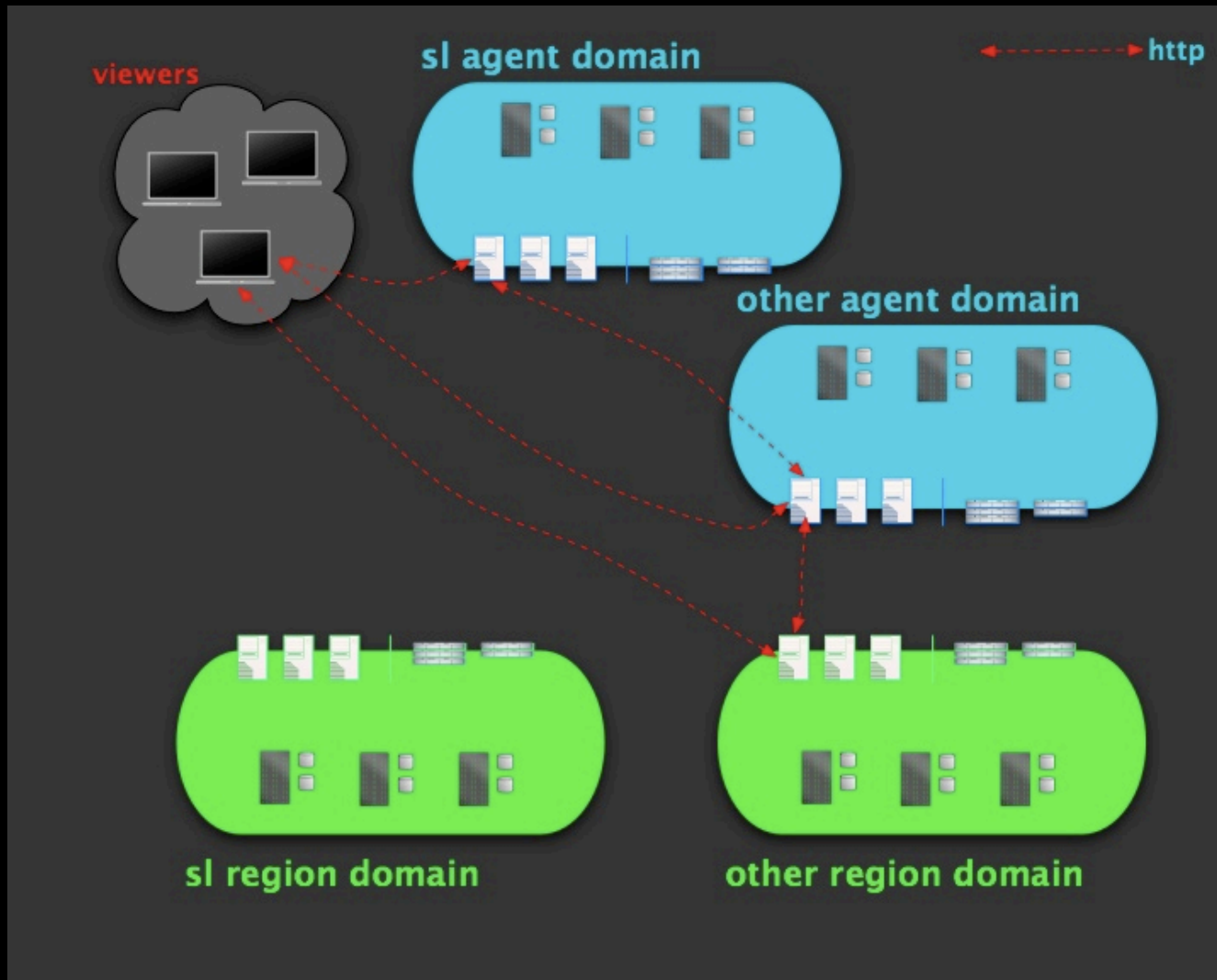
# SL is a World filled with Avatars



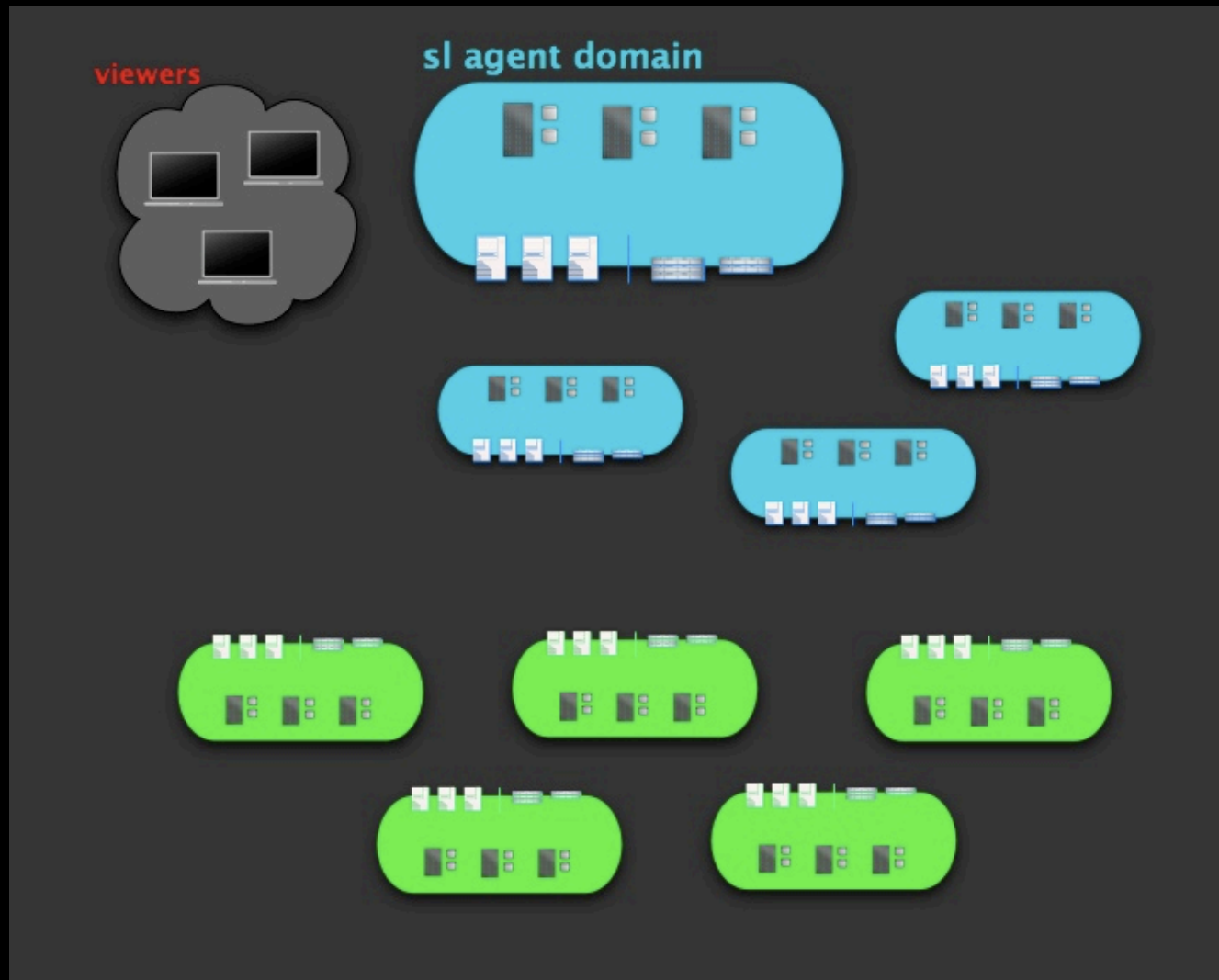
# These could be self-contained units



# For a larger scale



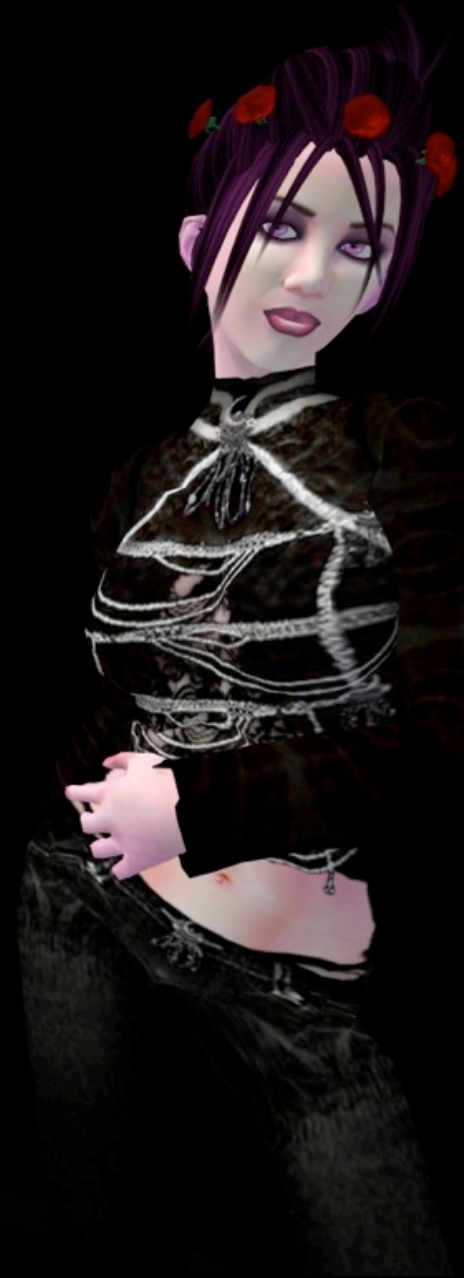
# Toward a global platform





**Second Life is a huge success, and the more people use it, the more interesting it gets. What you can do and be and create in this virtual world is limited only by SL technology, so we will never stop improving that technology. At the same time, we recognize that SL cannot truly succeed as long as one company controls the grid, so we must work toward opening the platform.**

**All of which is to say: we're only just getting started.**



a tiny aside

**The Second Life software is built and maintained by a 50-person developer team.**

**The Second Life infrastructure is built and maintained by a 12-person operations team.**



**[lindenlab.com/employment](http://lindenlab.com/employment)**

# Questions?



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