Science Circle Grid: Online collaboration and home for science education

Science Circle
December 24th, 2022

Stephen Gasior (Xootfly)

Science Circle Grid

Founding

The Science Circle started doing experiments with OpenSim v.7.x back in 2013.

Qasar discovered OpenSim and became enthusiastic when SL and IBM did some testing and performed the first HG jump from Secondlife to an OpenSim instance.

Those days OpenSim was not as stable as today and lot of features like profiles, groups, etc. Did not come "out of the box". Teleporting resulted often in loosing hair or worse.

Still, we managed to get all working and served from then on as a platform for our Secondlife members who wanted to explore the Metaverse.

Science Circle Grid

The Robust service is now running on Diva Distro version 0.9.2 and is hosted on a VPS in Germany. All regions are hosted in the Netherlands

The grid is now hosting 20 regions with welcome center, sandbox and the builder estates.

Hypergrid enabled, so come visit!

https://www.sciencecircle.org/sc-opensim/

http://hg.sciencecircle.org:8002

Virtual Islands for Better Education

Started as collaboration for Intel's ScienceSim venture

Decided to develop our own hosting grid platform
    Kira Komarov developed the OWL grids as Virtual Boxes running Linux

Hosted at Universities
    (parenthetical rant about how in the *old days* faculty could put up whatever they wanted with its own IP address and use university resources to host education stuff but now with the new generation of administrators ACTUALLY clamping down on security this is not feasible or in any way smart. But it probably never was, truly)

Migrated two multi-region islands to Science Circle in Summer of 2021 (OARs and IARs)

SC-Genome Island

By Mary Ann Clark (Max Chatnoir)

Biology Information and Activities
Used for college classes and appropriate for high school

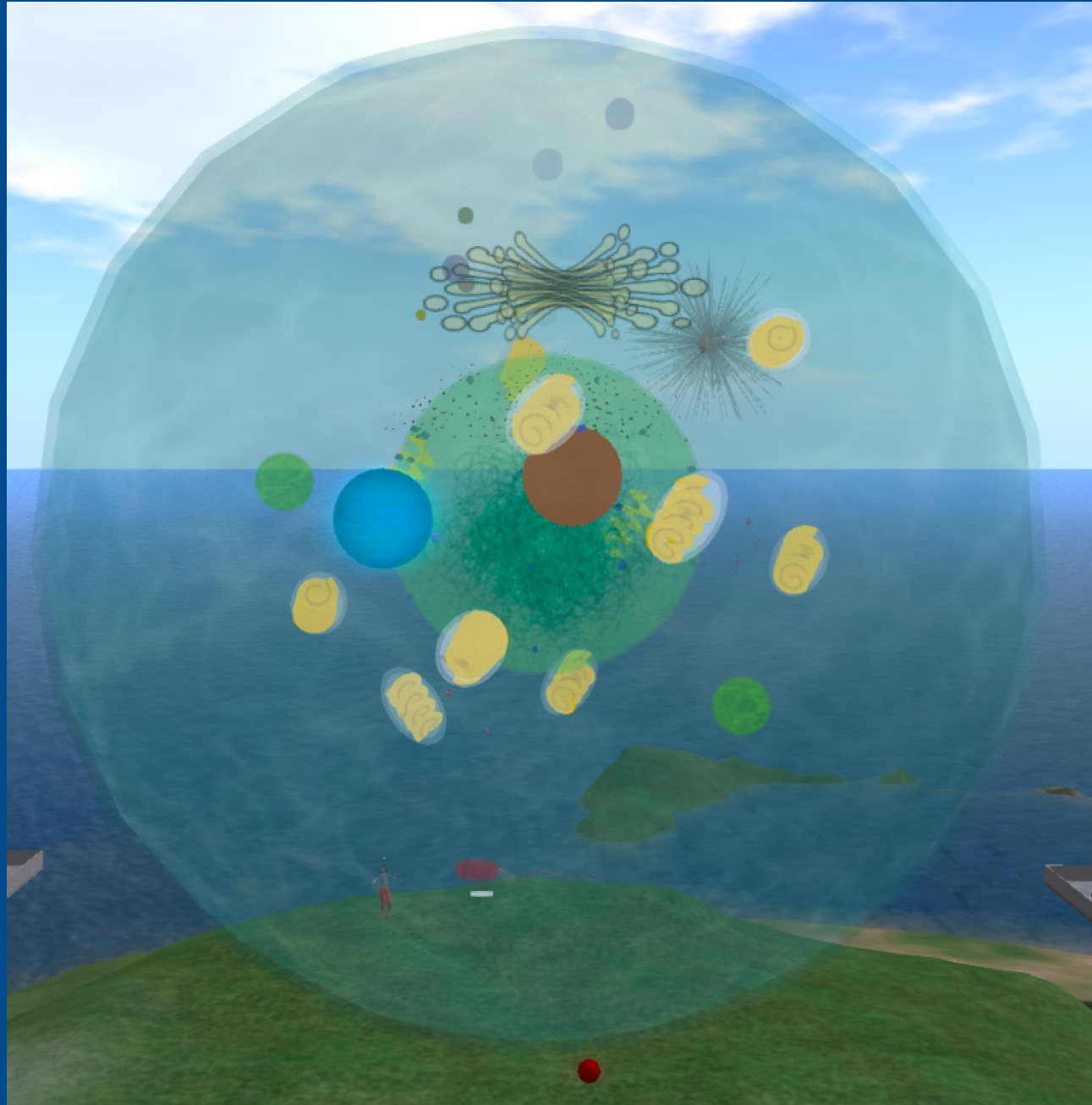Virtual Islands of Better Education Founder (migrated in Summer 2021)
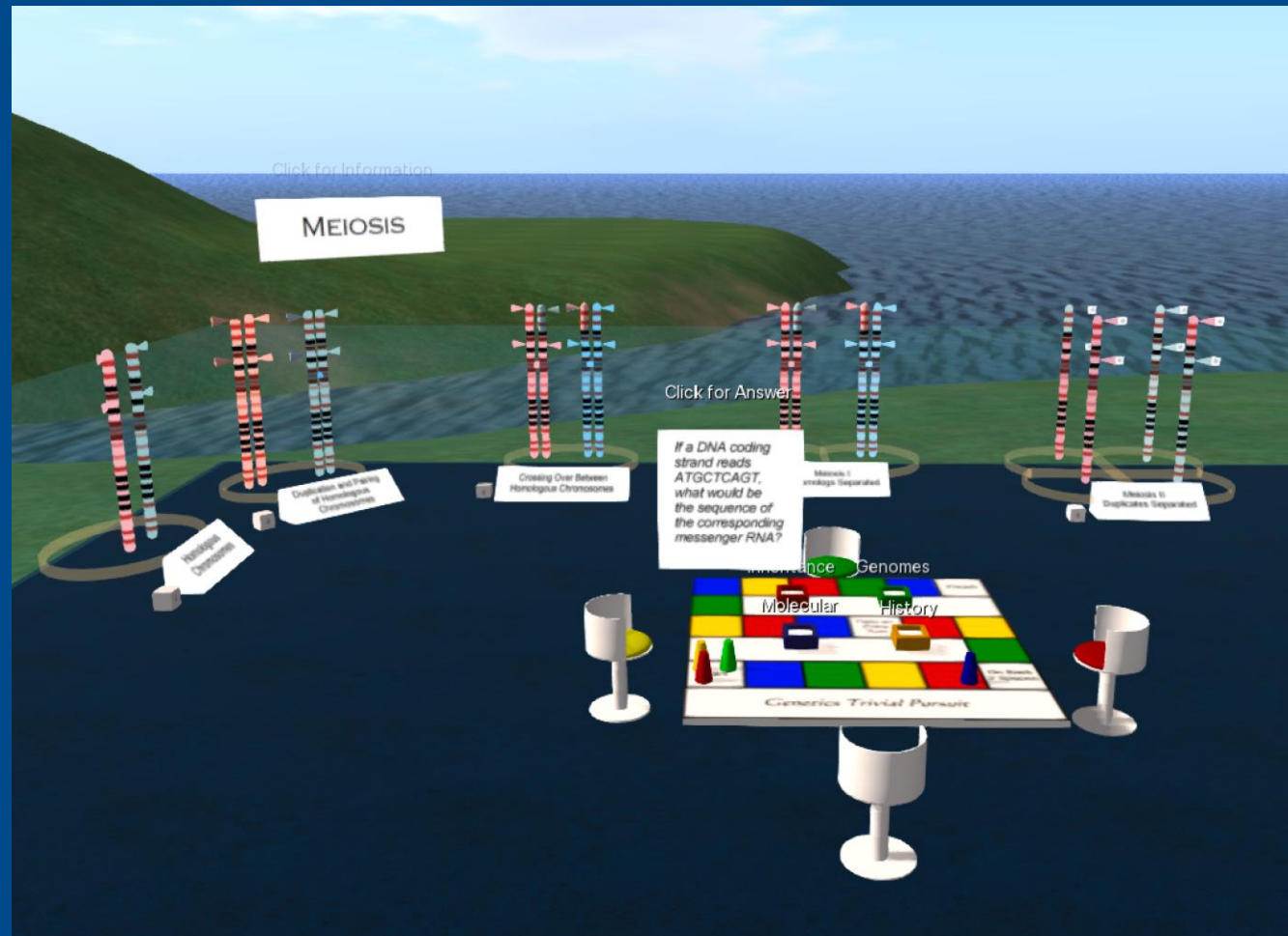
Huxley – Landing Center

Mendel – Genetics

Crick – Molecular Biology and Genomes

Hooke – the Big Cell

SC-Genome Island

The Big Cell

Meiosis Platform

SC-Nova Archaeology

By Marion Smeltzer (Nova Saunders)

What is Archaeology? display and several site recreations
Contracted work for Archaeology Foundations and presented at conferences

Virtual Islands of Better Education Founder (migrated in Summer 2021)

Nova Archaeology – Landing area and archaeology display

Werowocomoco -- Native American area

Altun Ha – Active dig site: Johnston Site

Allegheny and Portage – Colonial Northern Pennsylvania

SC-Nova Archaeology

Lemon House

Allegheny Railroad

SC-Virtual Abyssinia
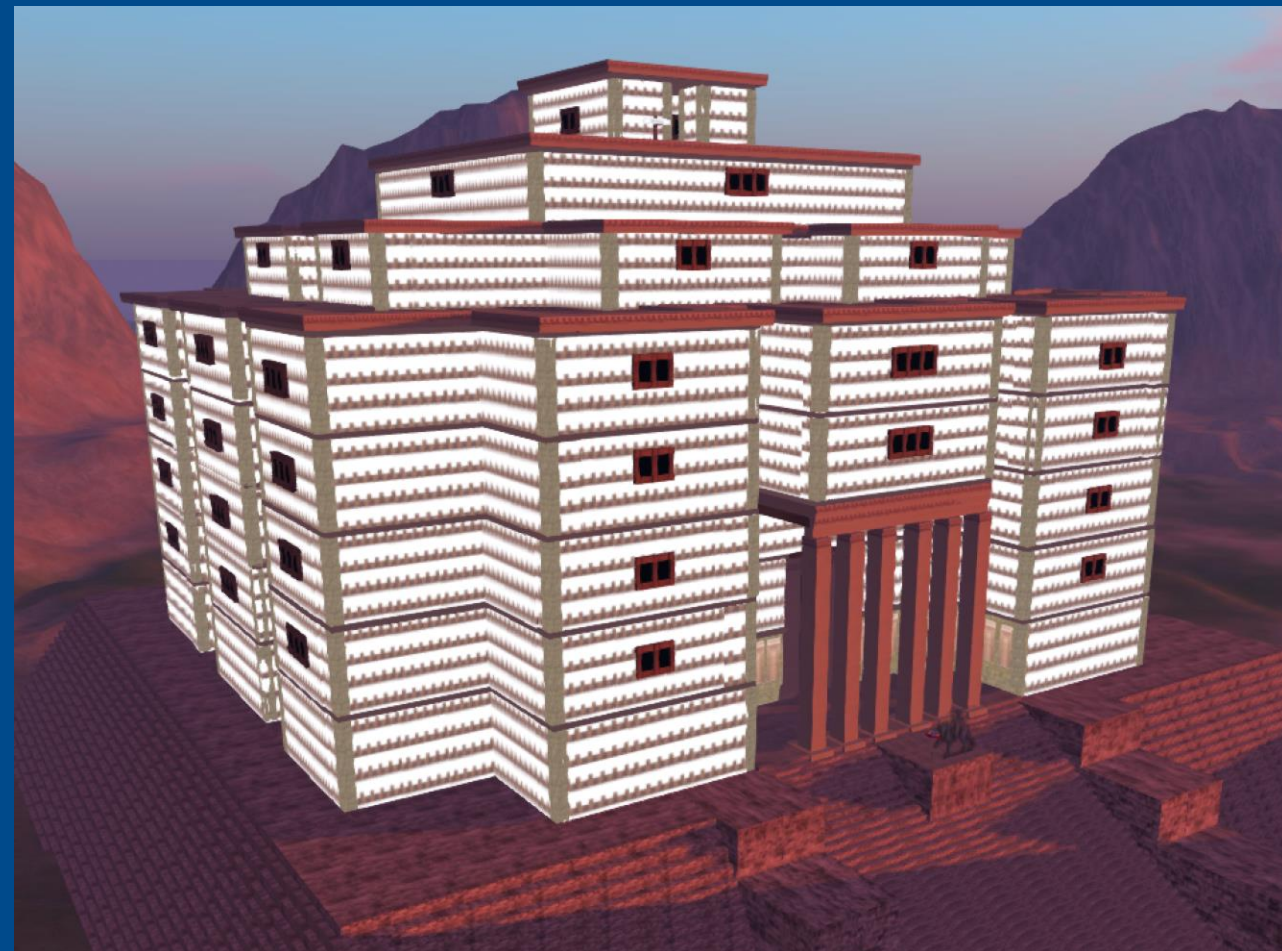
By Skip Dahlgren (SL: Ababrukh Aabye / Aba Brukh)

Virtual Abyssinia is intended as an archaeological museum, an introduction to the history of an important region (modern day Eritrea) which at least twice contained kingdoms that were seen as world powers of their time, & which now are largely forgotten.

SC-Virtual Abyssinia

Great Temple at Yeha

Grat Be'al Gebri
Administrative Palace

SC-Exploratorium

Recreation of SL Exploratorium by Patio Plasma (late Paul Doherty)

By Scire Gaea (Robert Brown)

Activities about physics and space and perception

The Exploratorium Cool Exhibits
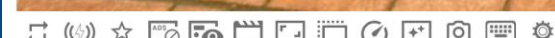Playgrounds Around The World
367 subscribers
Subscribe
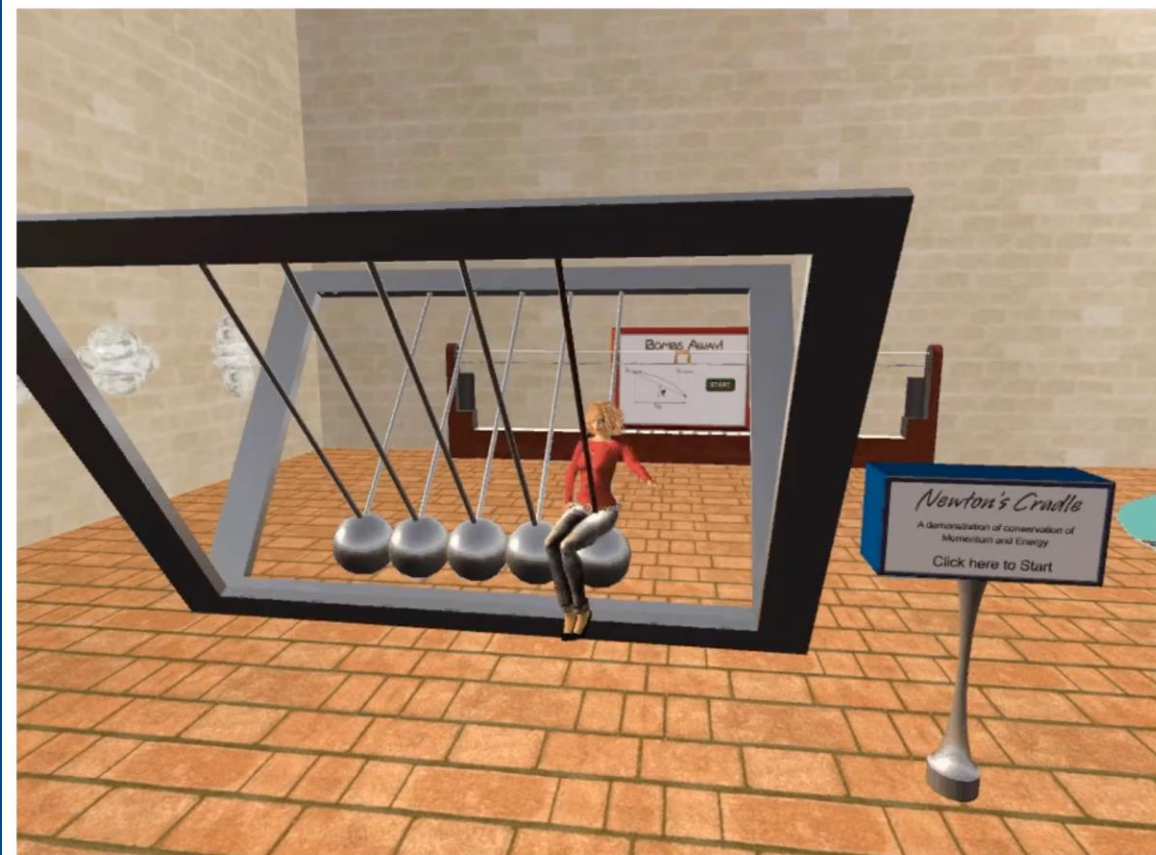👍 74 👎 ↪ Share ⬇ Download ☰+ Save ...

Exploratorium in Second Life
Exploratorium ✔
39.6K subscribers
Subscribe
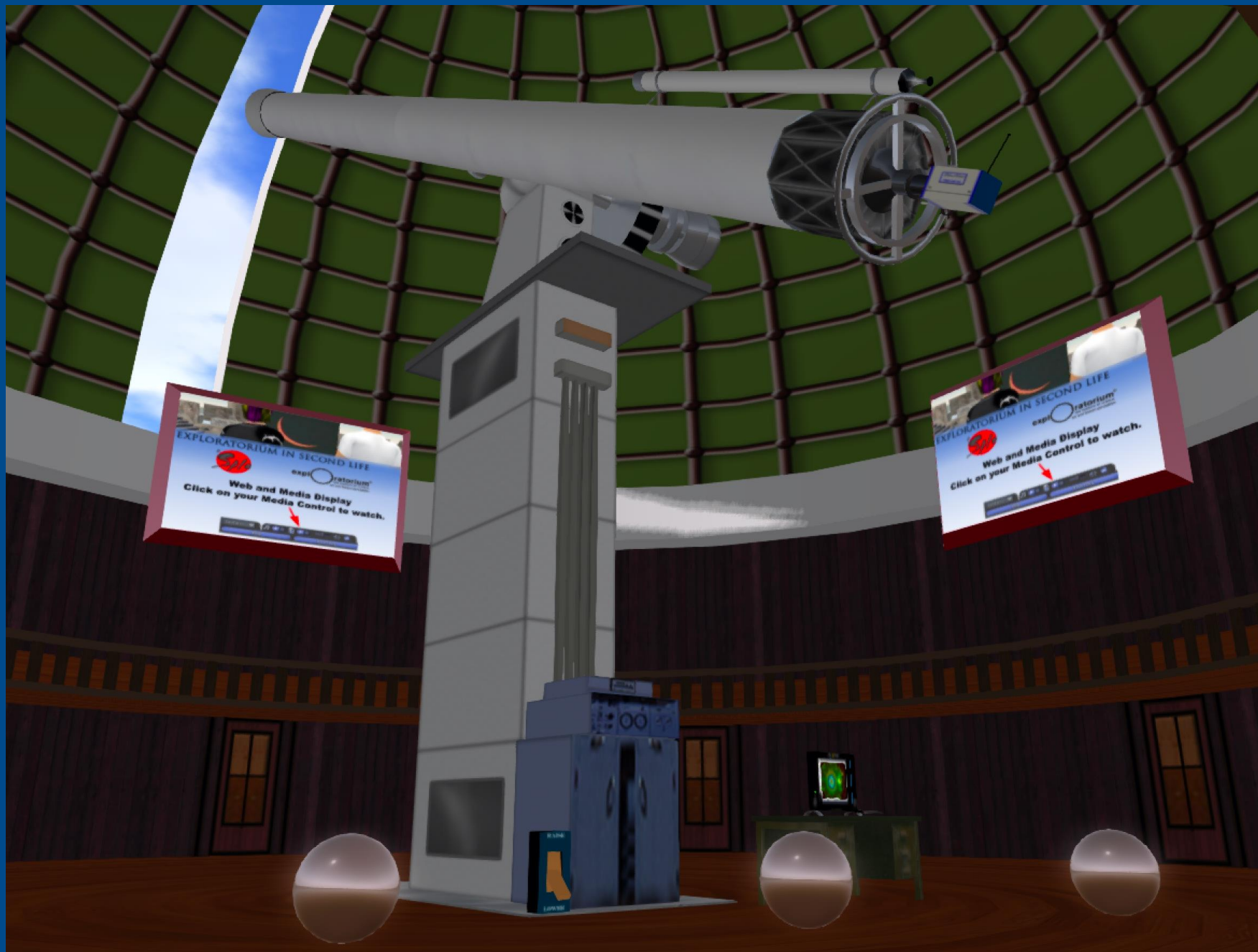👍 5 👎 ↪ Share ⬇ Download ✂ Clip ...

Real Life Exploratorium   Second Life

SC-Exploratorium

JAMES LICK OBSERVATORY
(A REASONABLE FACSIMILE)

BUILD BY EMILEIGH STARBROOK

The Viewer

Me on SC grid-Viewer is essentially the same

The Viewer

Some options:

https://www.dayturn.com/viewer/index.php
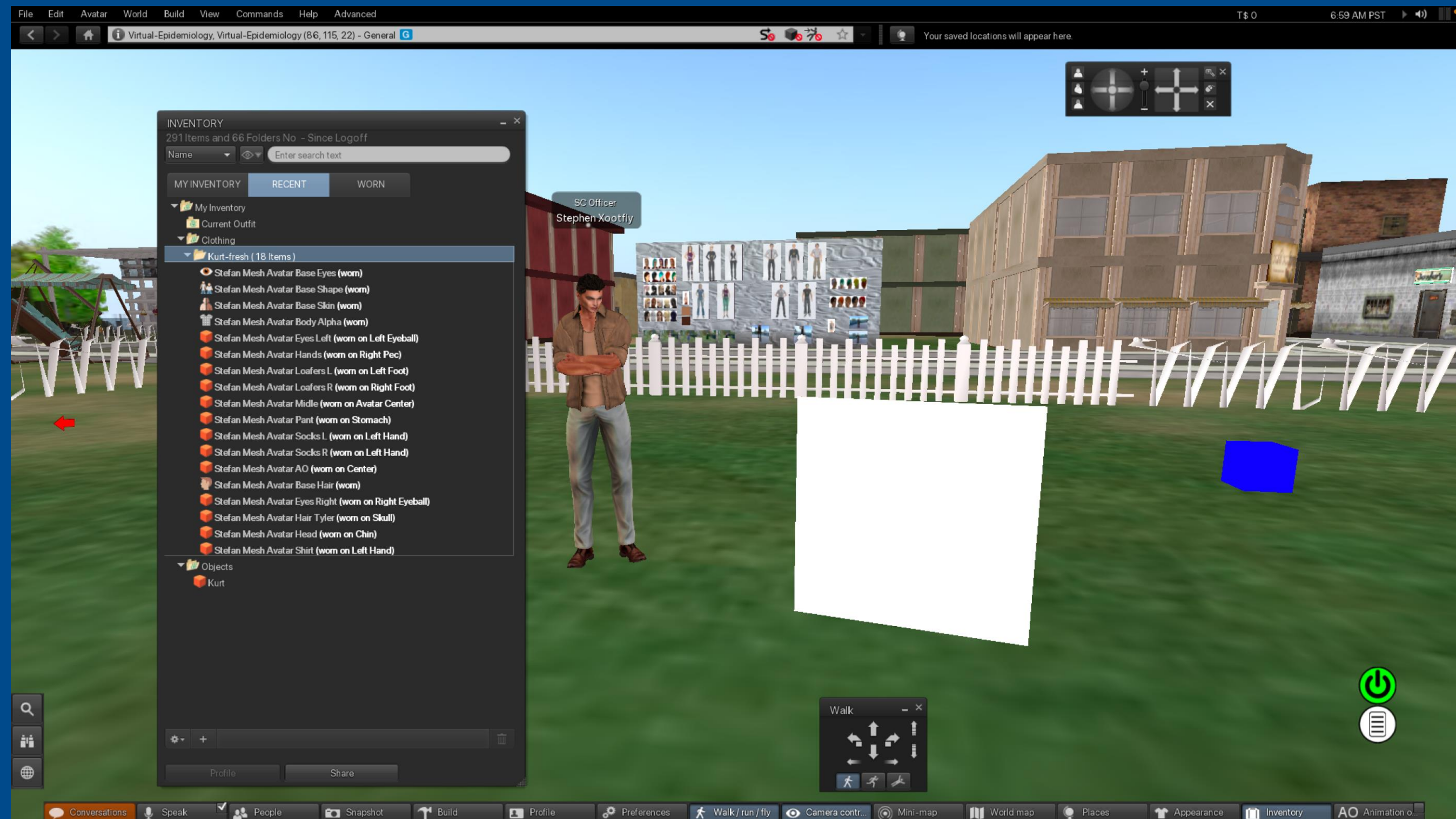
Because I use Firestorm for SL, it is helpful to have a viewer that sets up its own complete separate preferences files
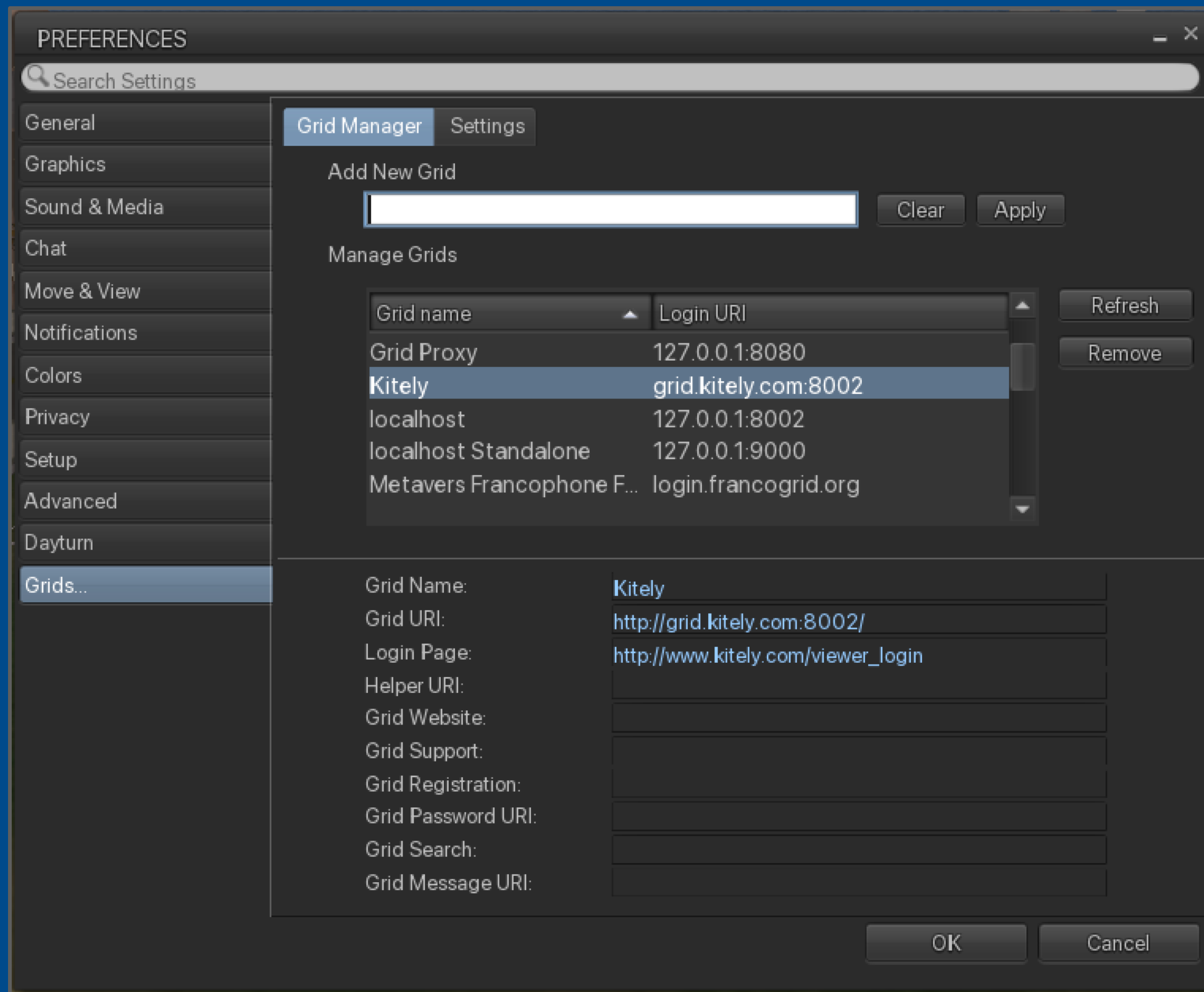

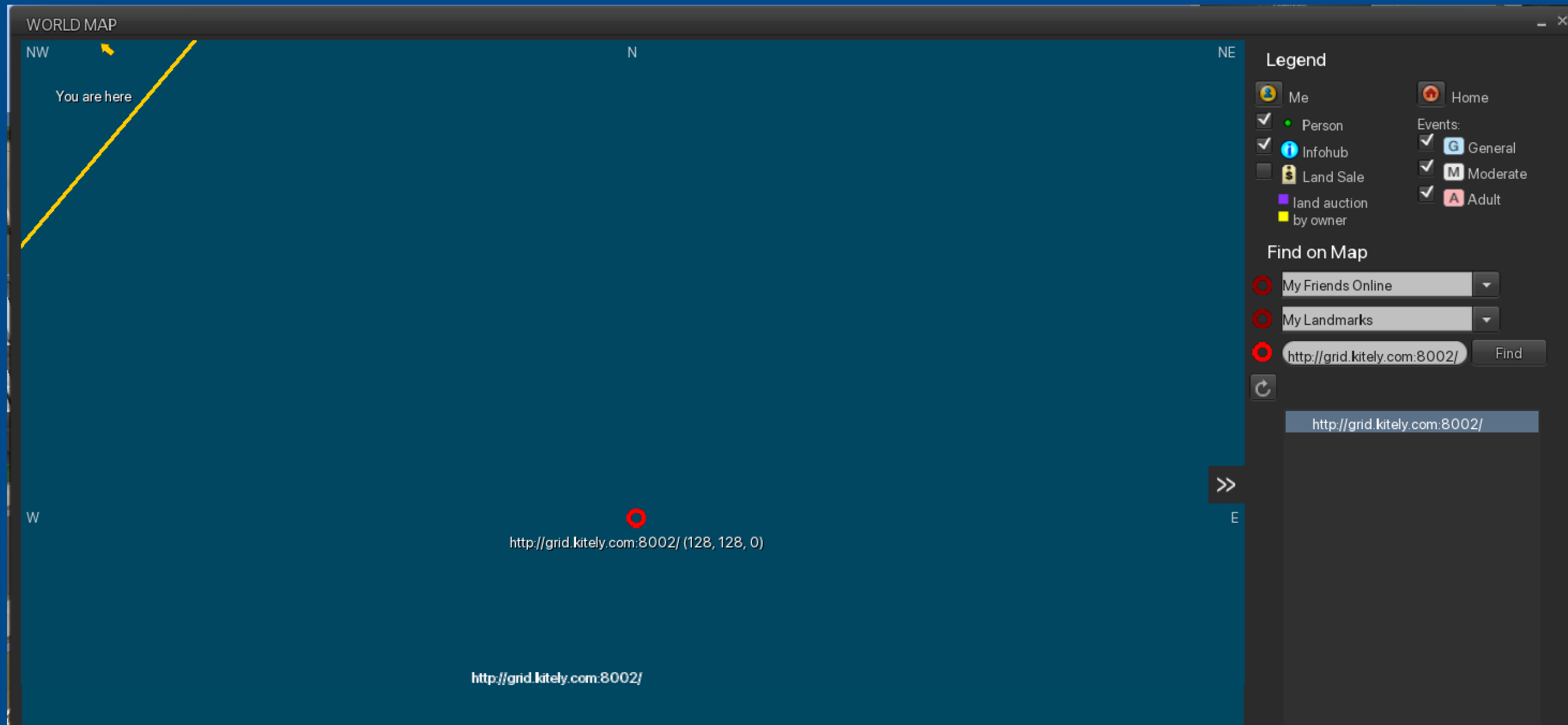If you don't already use FS, then this is most maintained viewer
https://www.firestormviewer.org/

The Viewer-Picking a grid

How to travel the Hypergrid

Map is same. Moving to a new grid just requires more "addressing"

WORLD MAP

NW   N   NE

You are here

Legend

Me   Home

Person   Events:
Infohub   General
Land Sale   Moderate
land auction   Adult
by owner

Find on Map

My Friends Online
My Landmarks
http://grid.kitely.com:8002/   Find

http://grid.kitely.com:8002/

W   E

http://grid.kitely.com:8002/ (128, 128, 0)

http://grid.kitely.com:8002/

http://grid.kitely.com:8002/

Landmarks in inventory work (most of the time) for hypergridding

Travel the HG with Friends

Hypergrid Safari – Thirza Ember (Wednesdays at 12 noon Pacific)
Home Base http://hg.osgrid,org:80:hg safari

Facebook Group
HG Safari

MeWe.com
HG SAFARI

https://hgsafari.blogspot.com/2015/09/safari-goes-looking.html

Your Own Grid Advantages

Lock down whatever privacy level you want
    -HG enabled or NOT

Include/Exclude whom you want
    -Both in terms of allowing select registrations
    -But also in gateway controls in the server preferences

Cost is the server
    -cost to build is free
    -OR enable a "funny money" economy
    -connect to fiat money – Kitely Coins, also Paypal linked tip jars

Can be commercial (probably not relevant)
    -Kitely has its own MP, rents land, rents services, vendor sales

Archives (more on that later)

OS Fundamentals

Asset location and description parser

Textures

inworld Programs

Physics Engine

Communications

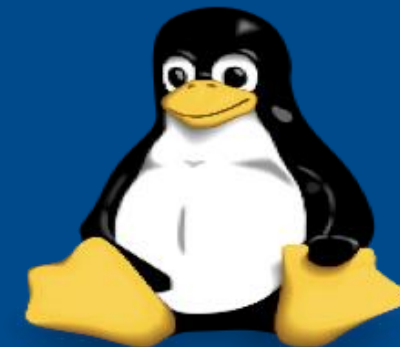Databases:user accounts,inventory, profiles, ...

OS Fundamentals

OS Fundamentals

Files and Data and Archives

Framework: .NET   mono   fmono

Operating System

Archives-Loading Premade

```
Region (root) # change region
Usage: change region <region name>
Region (root) # change region VIBE
Currently selected region is VIBE
Region (VIBE) # load oar filename.oar
```

Western Town

RATED: "Mature"

click to go to the page that tells
about this full OAR

Kids Place

RATED: "General"

click to go to the page that tells
about this full OAR
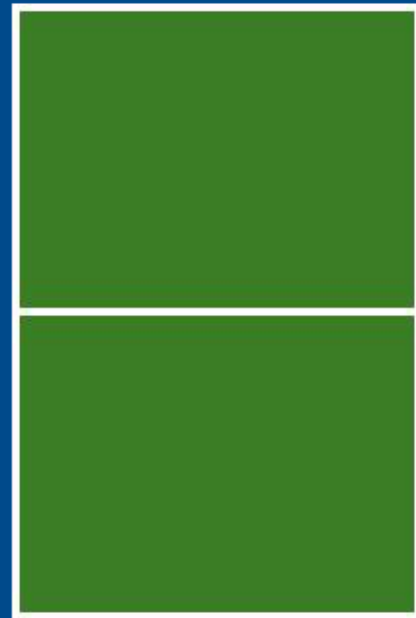
LindaKellieWesternTown.oar
LindaKellieKidsCenter.oar

OS

Archives-Saving Custom

Currently selected region is VIBE
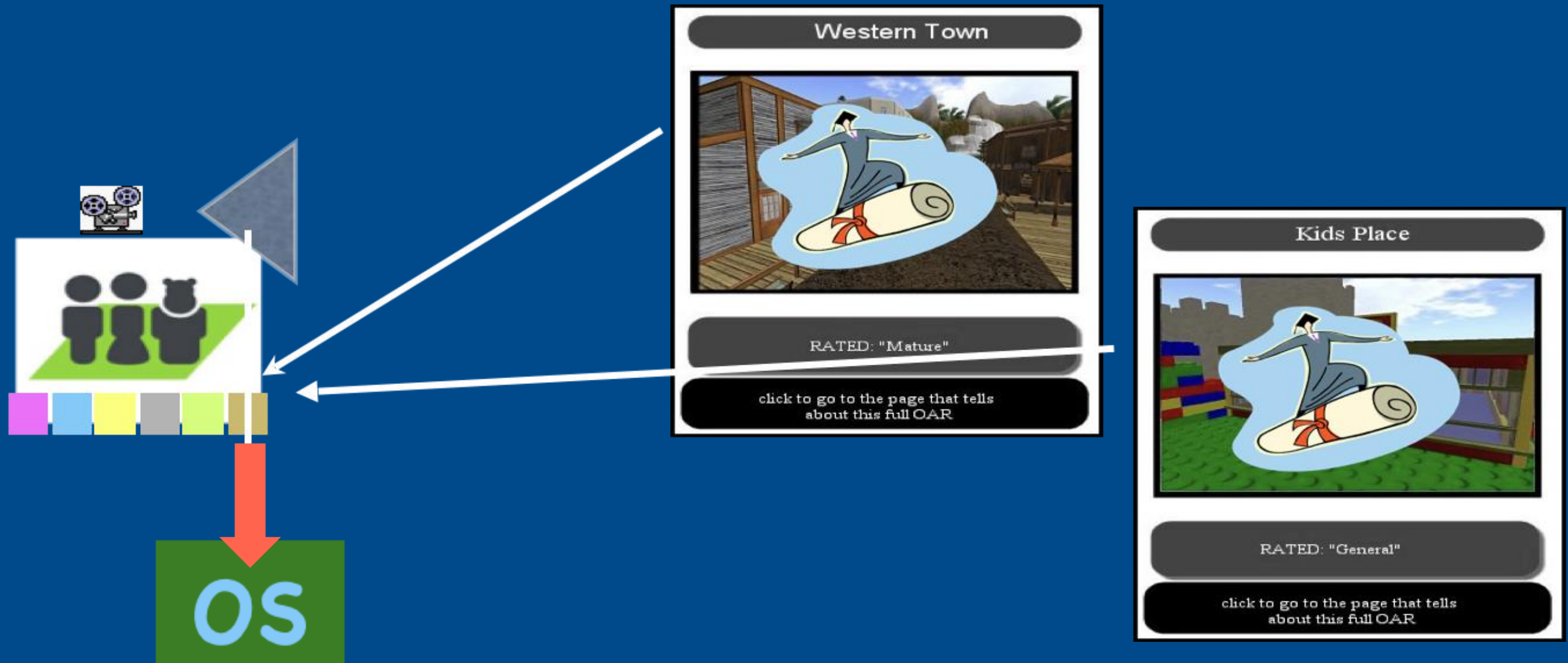Region (VIBE) # **save oar my_customized_region.oar**

Western Town

RATED: "Mature"

click to go to the page that tells
about this full OAR

Kids Place

RATED: "General"

click to go to the page that tells
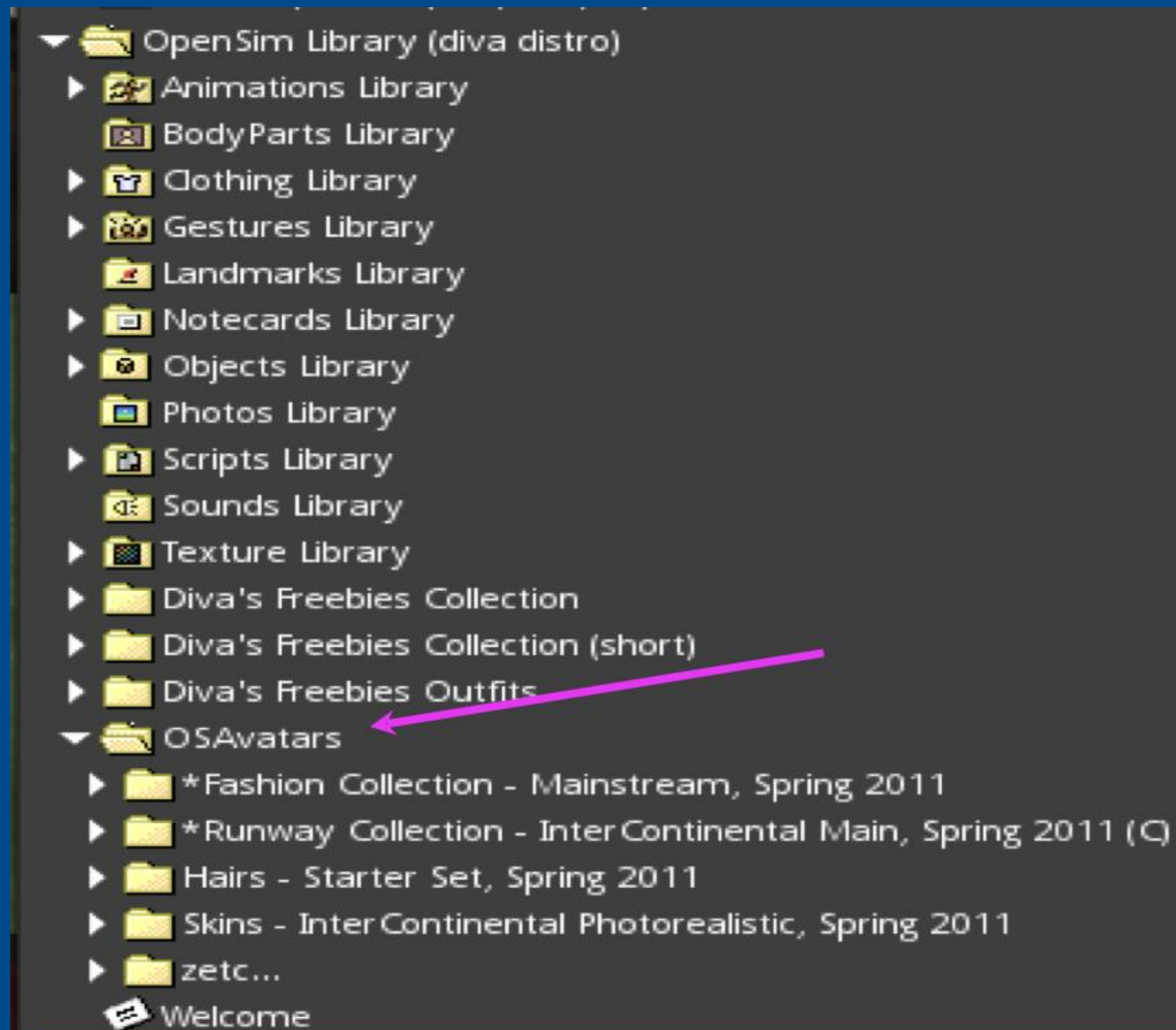about this full OAR

my_customized_region.oar -> web, dropbox, etc

Archives-IARs, Library

Sits in preferences folder on disk, everyone sees

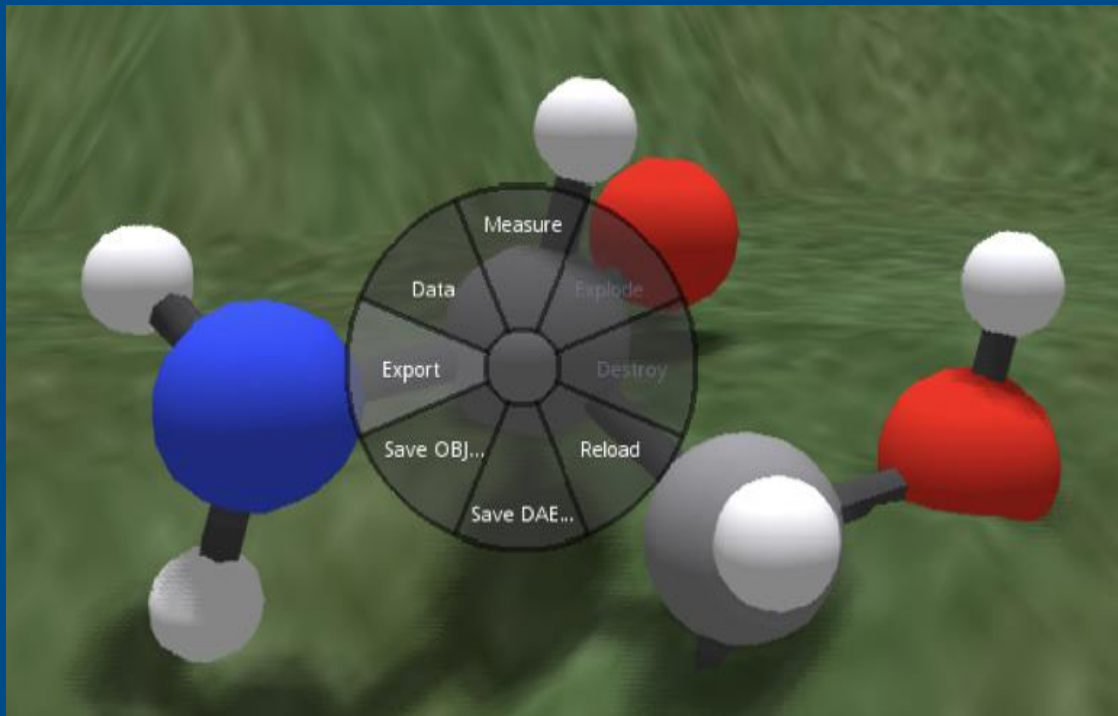to individual avatars
or to ~Library

OSAvatars.iar

OpenSim Library (diva distro)
- Animations Library
- BodyParts Library
- Clothing Library
- Gestures Library
- Landmarks Library
- Notecards Library
- Objects Library
- Photos Library
- Scripts Library
- Sounds Library
- Texture Library
- Diva's Freebies Collection
- Diva's Freebies Collection (short)
- Diva's Freebies Outfits
- OSAvatars
  - *Fashion Collection - Mainstream, Spring 2011
  - *Runway Collection - InterContinental Main, Spring 2011 (C)
  - Hairs - Starter Set, Spring 2011
  - Skins - InterContinental Photorealistic, Spring 2011
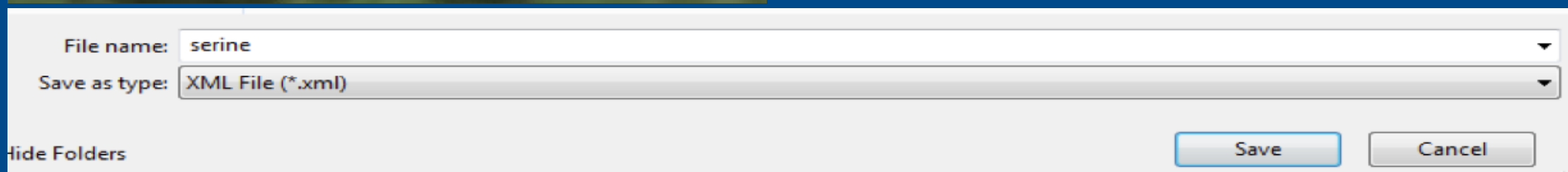 - zetc...
- Welcome

➢ Load OSAvatars.iar Stephen Xootfly (just for me)

Imports / Exports

SL object Export (XML, DAE, few others)
**have to be owner of object AND
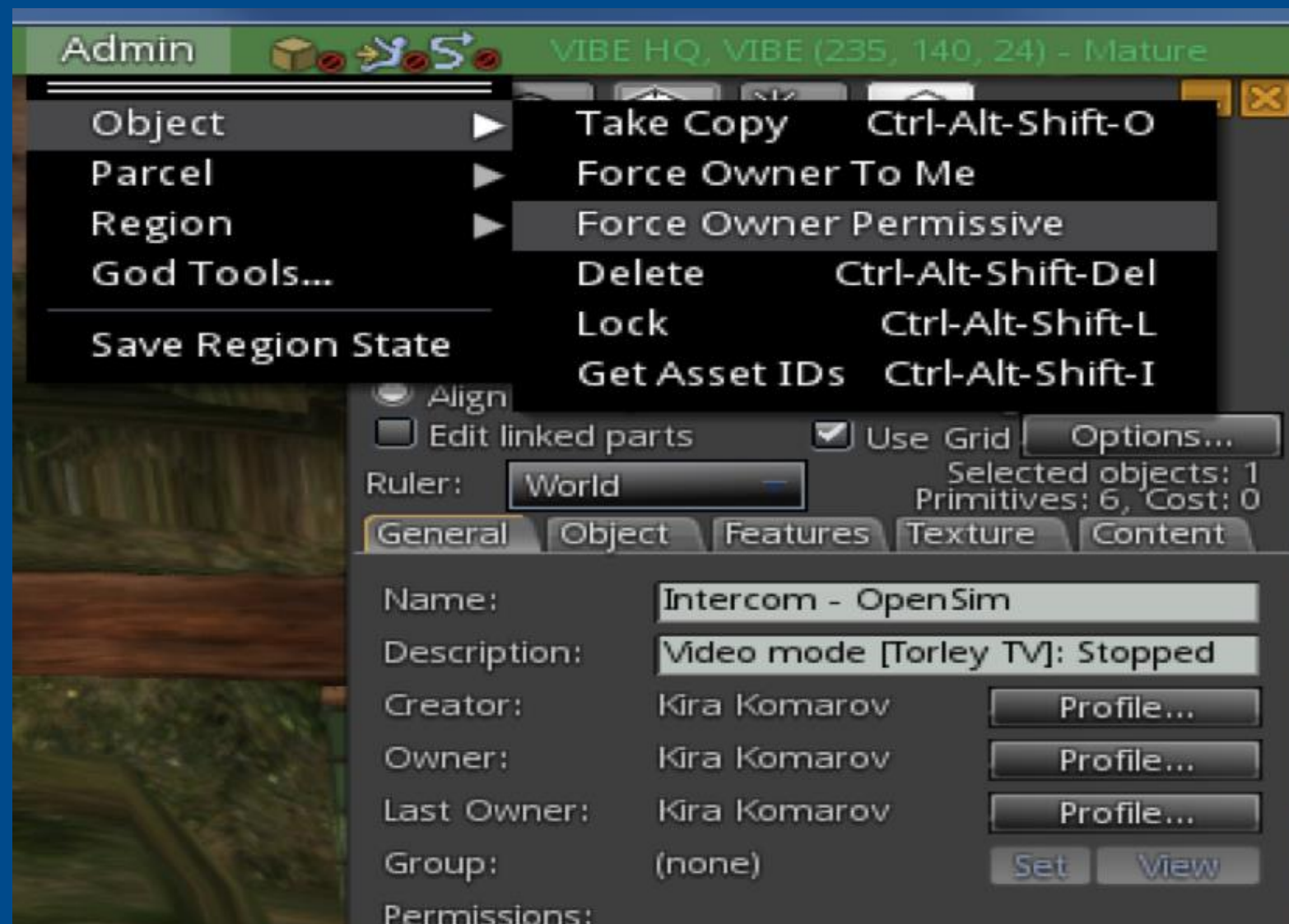textures or full perm textures

Not all viewers enable this

File name: serine
Save as type: XML File (*.xml)

Hide Folders   Save   Cancel

Import into Opensim

And can go other way
OS -> SL

Singularity Viewer - Stephen Xootfly

File   Edit   View   World   Tools

Image (free)...   Ctrl-U
Sound (free)...
Animation (free)...
Upload Mesh...
Bulk (free per file)...
Import XML
Import with Textures
Change Local Textures

God powers

Grid Admin, or designated Admin-power avatars are GODs

Good for fixing issues

BAD for intellectual property......

Summary

Opensim is even more VW content and experiences

Similar to SL to travel and make friends

Lots of phenomenal creators and social circles

Great for saving content AND redistribution

Designed to host yourself at relatively low cost
   But requires expertise

Still 'alpha' and boy does it show sometimes

Content protection and hence market is not great

Useful Sites

http://opensimulator.org/wiki/Main_Page

https://www.facebook.com/VirtualIsandsBetterEducation

https://sites.google.com/site/virtualislandsbettereducation

https://www.kitely.com/

https://www.osgrid.org/

http://www.themagicians.us/contact.php

https://www.avacon.org/

https://conference.opensimulator.org/