Getting Started in *Second Life* and *OpenSim*

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This document is intended to be a handy guide for scientists and scholars who want to explore the uses of Virtual Worlds (VWs) as a telepresence, collaboration, education/outreach, or data visualization platform. Suggested additions/corrections/etc. are most welcome.

Generalities:

Think of it as an experiment to see what this technology can do for you, and where things may be going for the future 3D Web.

There is a lot of research already going on in this arena, mostly in humanities and social sciences. See, e.g., http://jvwresearch.org/, http://terranova.blogs.com/, etc. Google more on your own. There is also a vibrant education community in SL.

There are hundreds if not thousands of VWs in line now; most are games, some are universal platforms; many are closed (e.g., intra-company), some are open. At this time *Second Life* (SL) is the most convenient one for general purposes, education, and as a handy starting point. *OpenSim* (http://opensimulator.org) is an open source version that allows anyone to build their own VWs, and it is the platform of choice for most of the serious VW research at this time; one example is Intel's *ScienceSim* (http://www.sciencesim.com).

The documentation generally sucks, but there are many good on-line resources (Google on). Here are some handy collections of links to start:

> http://www.simteach.com/wiki/index.php?title=Main_Page
> http://www.mica-vw.org/wiki/index.php/Links
> http://wiki.secondlife.com/wiki/Basic_Resource_Toolbox
> http://www-acad.sheridanc.on.ca/~jollymor/secondLife.html

You need a purpose – e.g., attending meetings, experimenting and exploring for your particular goals, etc. Otherwise it does not make much sense.

The real value of this technology is in the subjective quality of presence. You have to really try it to get it. Watching someone else do it does no good at all.

The best thing is to have someone tutor you for the first hour or so, and then you'd be able to continue on your own. Like with any other complex software system, it is a steep learning curve at first, but soon enough you navigate naturally and focus on the actual content and experience. It is like learning to drive, sort of.

Getting started:

You need two things: an avatar (SL account) and a browser/client.

Sign up at https://join.secondlife.com/. Pick any initial avatar, you will change it later. For the name, I suggest using your own, so that it is easy to identify with (both for you and for

your friends and colleagues). For example, I'd choose GeorgeDjorgovski or GeorgeD, or something like that, if I were getting one now (naming used to be more clunky and my SL avi is called Curious George, which is not so bad, monkey-wise :). Your last name will be Resident (silly, but you have no choice). For the OpenSim worlds, you can have any name you want, and for example, in *ScienceSim* we use our real names.

Download a client/browser. **DO NOT** use the official SL 2.x viewer! It is considered to be a failure by the cognoscenti, and moreover, it is effectively incompatible with the other types. The browser of choice for the *OpenSim* community is *Imprudence*, and I recommend using it. Download it from http://wiki.kokuaviewer.org/wiki/Downloads.

Say, if your name is JoeScientist, tour login would look like this (Grid = VW):

After you log in to SL, contact your friendly mentor, and go on from there. You should go to the MICA sim, *StellaNova*. Paste this in your web browser and click on the Teleport button: http://slurl.com/secondlife/StellaNova/123/131/32 .

Then click on this thing (New Residents Resource Kit dispenser):

It will give you a package, that will be a folder in your Inventory (click on the Inventory button in the lower right). Read the notes therein, and follow the instructions.

After reading the notecards, go to the walk-through tutorial at Caledon Oxbridge; there is a landmark in the folder to teleport there, but here is the web link:

http://slurl.com/secondlife/Caledon%20Oxbridge/92/198/28 .
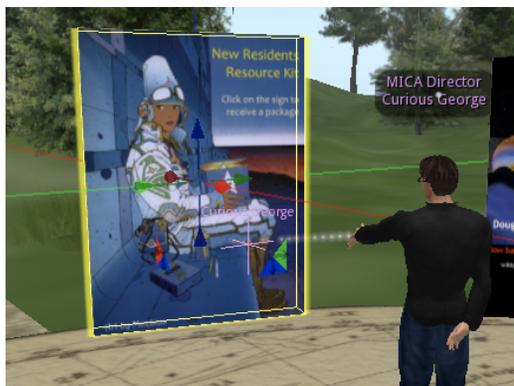
When you are done with it, everything will be much clearer. Do not hesitate to ask people to help you; most are friendly and helpful to noobies. In particular, go to the NCI hubs or the Help Island (landmarks are provided in the kit). There are often volunteer mentors there to answer questions.

First things to learn:

- How to move (walk, run, fly, teleport), and how to control the camera view independent of your avatar viewpoint.
- How to communicate. Local Chat is open to anyone within ~ 30 m, IMs are private. Both can be text or voice.
- How to change your avatar appearance. You really don't want to keep the signup look (a dead giveaway for noobies), because they do not look good, you have thousands of identical clones (identically dressed), and you want to have your avi resemble you, both so that you can identify with it, and that your friends and colleagues can identify it with you. Follow the instructions in the kit, and use the goodies provided there. At some

point you'll likely go shopping (for free or for pay), but you can start with the freebies we provided.

Setting up the voice communications:

Voice is much better than text in terms of the bandwidth, and also you can recognize your friends and colleagues speaking in discussions, etc. This is a bit tricky to set up at first, but fortunately you only have to do this once:

1. Ideally, use a headset, or at least headphones. If you use your machine's built-in mike and speakers, you tend to get an echo.

2. Make sure that your machine audio I/O is set correctly, volumes up, etc.
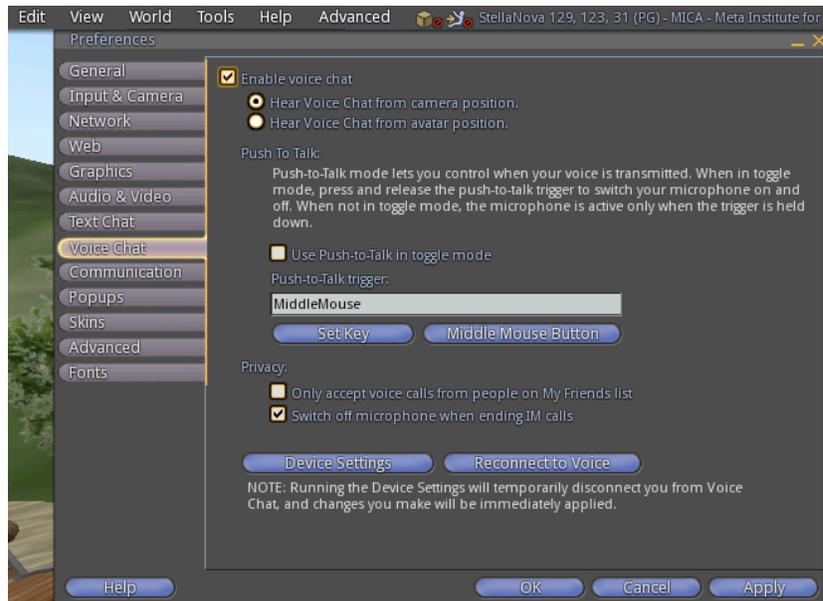
3. Then in the upper left, click on the Edit pulldown menu, then Preferences, then the Voice chat tab. Check the Enable box, then click Apply and OK.

4. Then in the lower right, click on the arrow next to the speaker symbol, and on the pullup menu, move the Master and the Voice sliders all the way to the right, and all others to zero. (You can experiment with them later).

5. Then click on the speech bubble to its right. It should light up, and a widget will pop up showing the names of active speakers near you. You should be able to hear the others at this point.

6. Then click on Talk to speak. There is a little lock symbol inside the Talk button; if you click there, it will keep the Talk active. However, it is a good idea to turn it off when you are not speaking. When you speak, green radio waves will appear above your head. If they turn red, you are too loud!

Once you have all this set up, toggling the Talk button is all you need to do.

Giving presentations in SL

Save your ppt slides as jpegs, and upload them using the File menu in the upper left. Images ("textures") can be uploaded into SL at a cost of 10L per image. You can buy Linden currency with a credit card or PayPal, either by clicking on the L$ button in the upper right, or by logging into your SL account on the web (https://id.secondlife.com/openid/login). The uploaded images are in the Textures folder in your inventory, and then you can move them wherever.

I always use jpegs, but I think that some other image formats will also work. Plots in ps or pdf should be converted first, but mind the resolution: think projectors - if it looks OK in ppt, it will be fine in SL. So, use large enough fonts and thick enough lines as you would for a *readable* ppt slide. SL internally rebins every image to the nearest lower power of 2, with max = 1024. So, for example, an input image of 3000x2000 pixels will end up as 1024x1024, 1100x800 will end up as 1024x512, etc. You can stretch them to the right proportions later. A standard ppt save of jpeg slides with 180 ppi will result in the highest available resolution, i.e., 1024 sq. when uploaded and shown.

You can display slides through a screen gizmo you can get from a dispenser at the *StellaNova* auditorium, http://slurl.com/secondlife/StellaNova/218/214/32 , or by asking someone who has a copy. You rez a copy of the screen, copy your slides into it, and edit the script there. Someone should show you how to do it the first time. You control the screen either with Local Chat text commands, or with a HUD included in the screen package.

Movies can be shown through a web link, Youtube included. That's a separate story. You cannot have embedded movies in your slides.