The Linden Blog has a new article this month titled: <a style="font-size: 13px; line-height: 19px;" href="http://community.secondlife.com/t5/Featured-News/A-Look-Back-at-Improvements-to-Second-Life-in-2012-and-Forward/ba-p/1775925">A Look Back at Improvements to Second Life in 2012 and Forward to 2013</a>. It is worth the read, but it is pretty small. Having written 568 posts this year I thought it was a little light. So, I decided to look back over the year. I had no idea how much work I was getting into.

This article is the result of my look back at 2012. I have uploaded the Word file I used to compose the article. I think it makes for a handy quick reference that can be searched. I find trying to search the blog for specific information less than ideal.  So, if you want a quick reference to when things happened, get the file.

This article is long. But, check it out to see how many things you remember. I was surprised how much I had forgotten. I was also surprised how fast and how slow some things happened.

Please forgive the poor use of tense. I found writing in past tense rather awkward.

<h2>January 2012 – 46 Articles</h2>

In January the Mesh Deformer went to Alpha version. See: <a href="http://blog.nalates.net/2012/01/01/sl-mesh-deformer-goes-alpha/">#SL Mesh Deformer Goes Alpha</a>. Karl Stiefvater (in-world: Qarl Fizz) released a video of it in action. Later in the moth I was describing how it worked and some of the problems with the first version. See: <a href="http://blog.nalates.net/2012/01/11/sl-content-mesh-ug-week-2/">#SL Content-Mesh UG Week 2</a>. Over a year later the project is still in testing.

The Milkshake Viewer may a short début. I wrote about 12 viewer reviews.

In January we got a scare from Blender Development when they considered dropping Collada support. I think this lead to Linden Lab and Domino Marama and Gaia Clary getting involved with the Blender developers. We now have good support of Collada for Second Life in Blender.

The first week of January saw a hardware failure trash a roll out and bring Second Life to its knees. Through the rest of the month we saw rolls succeeding. Scripting was seeing revision of List functions that gave us better performance. Most List functions were in testing through January.

Advanced Creator Tools aka Experience Tools were just a hot rumor.

Direct Delivery went into Beta testing January 10. By the end of the month merchants were crying a river about how bad Magic Box delivery was getting.

We got the ability to cross into any of the 8 surrounding regions. Previous we could only enter 4 (East, West, North, and South).

The Linden Scripting Language was advancing so fast the viewer’s script editor was falling behind. An effort was started to enable the viewer to update its scripting language syntax from the region servers. I think that task remains incomplete. But, scripting changes have slowed and the viewer’s editor is catching up.

Older versions of viewers began to disappear from Linden’s download pages. I begin to write about how the Linden 1.23.x viewer would soon no longer be used. I just recently wrote another of those articles in regard to <i>Server Side Avatar Baking</i>. It might actually happen sometime in 2013… Shows what I knew, not.

Qarl Fizz’s alignment tool was rejected by Linden Lab. It has been adopted by several Third Party Viewers. If you have forgotten why it was rejected see: <a href="http://blog.nalates.net/2012/01/14/qarl-alignment-tool-rejected/">Qarl Alignment Tool Rejected</a>. There is quite a bit of speculation in the article.

Toward the end of the month we saw the US administration roll out new efforts to get <b>SOPA</b> and <b>PIPA </b>like laws on the books. Executive Orders and efforts to sign a treaty with the UN to give control of the Internet to the U.N. continue. Remember the majority of U.N. members are NOT democracies. See: <a href="http://blog.nalates.net/2012/01/20/im-back/">I’m Back…</a> and <a href="http://blog.nalates.net/2012/01/29/sopa-pipa-opena-and-acta/">SOPA, PIPA, OPENA, and ACTA</a>. This is still something people everywhere need to fight.

A new combat meter was release in Second Life around the end of the month: <a href="http://blog.nalates.net/2012/01/31/unitycore-rpcombat-meter-coming-to-sl/">UnityCore</a>. One of the larger role play games in SL adopted it: <a href="http://secondlife.com/destination/norsim">Lands of NoR</a>.

[caption id="attachment\_9323" align="aligncenter" width="435"]<a href="http://blog.nalates.net/?attachment\_id=9323" rel="attachment wp-att-9323"><img class="size-medium wp-image-9323" alt="Lands of NoR December 2012" src="http://blog.nalates.net/nalates/wp-content/uploads/2012/12/NoR12-2012-435x268.jpg" width="435" height="268" /></a> Lands of NoR December 2012[/caption]

The Imprudence and Kokua development team was deciding what to do with their efforts and how and whether to continue developing the viewers or not. I just wrote a similar article in late November.

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<h2>February – 53 Articles</h2>

Rod Humble, SL CEO, commenting in his <a href="https://my.secondlife.com/rodvik.linden/posts/4f285951be9e8f0001002204">feed</a> stirred up hope of last names returning. Hopes were eventually dashed.

New functions and the LIST functions made it into the Release Candidate channels. Problems were found and the changes continued to come into RC channels as more fixes were applied. About mid month the list changes rolled to the main channel.

The first try of the Phase I Multi-Threaded Region Crossing package arrived in a RC channels. Late in 2012 the Phase II part made it into QA on ADITI.

The Mini-map avatar elevation problems started getting attention. I was eventually fixed.  Still, it is only accurate up to about 1,000m.

Oskar Linden made an excellent reply to an irate ignoramus. See: <a href="http://blog.nalates.net/2012/02/02/sl-response/">#SL Response</a>. I still send this link to people.

Market Place delivery continued to be a problem with early morning deliveries (US West Coast time) being particularly bad. The Lindens found the problem and announced a fix. Valentine’s Day saw a huge Magic Box failure in the Market Place. See: <a href="http://blog.nalates.net/2012/02/15/valentine-fail-update/">Valentine Fail Update</a>. In late February we saw the Received Items folder appear for testing.

Server updates in the Release Candidate channels created avatar ghosting problems.

Hexagon 2.5, Bryce 7.0, and Daz Studio 4 Pro were released as free programs.

Small bits of news about Linden Realms Tools, aka Experience Tools and eventually named Advanced Creator Tools, continued to leak out. Mid-February we got more information on what parts of the tools would be released and a rough ETA.

The Lab proposed guess blogging in the Linden Blog. Drama erupts. See: <a href="http://blog.nalates.net/2012/02/11/sl-lindens-blogging-offer/">#SL Linden’s Blogging Offer</a>

The Phoenix-Firestorm team publishes a wiki page on white listing viewers with anti-virus software. See: <a href="http://blog.nalates.net/2012/02/09/second-life-and-anti-virus/">#SecondLife and Anti-Virus</a>. I added more information for you to consider than the Firestorm people did.

A new release of the Mesh Deformer came out. This one was designed to handle the ‘crumpling’ problems. I looked at it in: <a href="http://blog.nalates.net/2012/02/17/mesh-deformer-0-2-update/">Mesh Deformer 0.2 Update</a>.

A feature request (<a href="http://jira.secondlife.com/browse/STORM-1803?”>STORM-1803</a>) was filed requesting the viewer be changed to allow uploading of ANIM files. These are animation files with more control than the then current BVH files and they have more features that closely match SL’s internal animation format. Eventually, the feature was added to the viewer. See: <a href="http://blog.nalates.net/2012/02/14/sl-animation-changes/">#SL Animation Changes</a>.

[caption id="attachment\_6563" align="aligncenter" width="435"]<a href="http://blog.nalates.net/2012/02/17/sl-server-scripting-news-update-week-7/betaserv120216\_003/" rel="attachment wp-att-6563"><img class="size-full wp-image-6563" alt="Testing Maze in ADITI" src="http://blog.nalates.net/nalates/wp-content/uploads/2012/02/BetaServ120216\_003.jpg" width="435" height="227" /></a> Testing Maze in ADITI[/caption]

We started to see the first of the Pathfinding Project documentation appear in the SL Wiki. Regions in ADITI that were running the Pathfinding beta were announced. The official announcement appears 2/16. See: <a style="font-size: 13px; line-height: 19px;" href="http://blog.nalates.net/2012/02/16/pathfinder-official-announcement/">Pathfinder Official Announcement</a>.We met Lorca Linden this month, he primarily worked on Pathfinding.

Pink Prims bug hit hard in mid month. SL Viewer 3.2.8 was where we first saw it. See: <a href="http://blog.nalates.net/2012/02/16/pink-prims-bug/">Pink Prims Bug</a>.

[caption id="attachment\_6534" align="aligncenter" width="435"]<a href="http://blog.nalates.net/2012/02/16/pink-prims-bug/blaise\_glendevon\_004a/" rel="attachment wp-att-6534"><img class="size-medium wp-image-6534" alt="Image by Blaise Glendevon" src="http://blog.nalates.net/nalates/wp-content/uploads/2012/02/Blaise\_Glendevon\_004a-435x225.jpg" width="435" height="225" /></a> Image by Blaise Glendevon[/caption]

Word comes that the Imprudence Viewer will live on. See: <a title="Edit “Imprudence Viewer to Live”" href="http://blog.nalates.net/2012/02/21/imprudence-viewer-to-live/">Imprudence Viewer to Live</a>. That was optimistic. I expect SL users to drop it once the Avatar Baking change arrives in late February.

Hamet at New World Notes speculates on directions the Lab will take for 2012.  <a href="http://nwn.blogs.com/nwn/2012/02/linden-lab-new-products-besides-sl.html">Rod Humble Drops Hints About Linden’s New Projects</a>. We will see the projects released in the last half of 2012.

In late February we saw the release of a revised Linden Lab viewer policy. This was a major dramatic event in the SL saga. See: <a href="http://blog.nalates.net/2012/02/24/sl-viewer-shock-wave/">#SL Viewer Shock Wave</a>. An audio of the meeting announcing the change was released a couple days later. You can find the original recording here: <a href="http://lecs.opensource.secondlife.com/tpvd/meeting/2012-02-24.mp3”>TPV Dev’s Meeting 2012-02-24</a>. My summary with time marks of the recording is here: <a href="http://blog.nalates.net/2012/02/26/sl-viewer-policy-change-meeting/">#SL Viewer Policy Change Meeting</a>. Later Oz Linden answered questions on SLUniverse’s forum. See: <a href="http://blog.nalates.net/2012/02/28/oz-answers-tpv-policy-questions/">Oz Answers TPV Policy Questions</a>.

Avatar status checks changed. It seems <a title="LlGetAgentInfo" href="https://wiki.secondlife.com/wiki/LlRequestAgentData”>llRequestAgentData</a>() was being used to stalk avatars. So, the function was nerfed. But, there were so many legitimate uses for the function that broke the Lindens rolled the nerf back until they could devise a way to handle the legitimate uses. See: <a title="Edit “#SL Server-Scripting UG News Week 9”" href="http://blog.nalates.net/2012/02/28/sl-server-scripting-ug-news-week-9/">#SL Server-Scripting UG News Week 9</a>.

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<h2>March – 54 Articles</h2>

This month we saw nVidia Driver 295.73 causing Second Life Viewers to crash. See: <a href="http://blog.nalates.net/2012/03/01/nvidia-drivers-update-problems/">NVIDIA Drivers Update Problems</a>.

Third Party Viewer policy drama continued. This month saw a Phoenix-Firestorm Hour meeting to discuss the challenges. The meeting was held in 4 regions and server performance was horrid. A recent Phoenix-Firestorm Hour held in the FS Support Region was amazingly better. See: <a href="http://blog.nalates.net/2012/03/02/phoenix-firestorm-hour/">Phoenix Firestorm Hour</a> for my time marked summary of the March meeting. Also see: <a href="http://blog.nalates.net/2012/03/08/oz-linden-interviewed-by-jessica-lyon/">Oz Linden Interviewed by Jessica Lyon</a>. My time mark indexed summary is here: http://blog.nalates.net/2012/03/09/oz-linden-interview-summary. An article inspired by the drama is: <a href="http://blog.nalates.net/2012/03/08/rebuttal-to-second-life-failing/">Rebuttal to Second Life Failing</a>.

A Pathfinding tutorial appeared in the SL Wiki. Pathfinding Tools would appear in a <i>project</i> viewer in late March.

The SL Viewers get more debug code to track down avatar bake fail problems. See: <a href="http://blog.nalates.net/2012/03/06/sl-clouds-grey-and-blurry-avatars/">#SL Clouds, Grey, and Blurry Avatars</a>. Eventually the data collected leads to the project we now know as Server Side Avatar Baking.

[caption id="attachment\_6718" align="aligncenter" width="435"]<a href="http://blog.nalates.net/2012/03/06/sl-clouds-grey-and-blurry-avatars/rez-test01\_002s/" rel="attachment wp-att-6718"><img class="size-medium wp-image-6718" alt="The Problem" src="http://blog.nalates.net/nalates/wp-content/uploads/2012/03/Rez-test01\_002s-435x280.jpg" width="435" height="280" /></a> The Problem[/caption]

This month saw the departure of Esbee and Charlar Linden. The future of the Content &amp; Mesh User Group came into question. It survived with confirmation coming about mid-March.

ADITI login and inventory problems started and became a serious annoyance. See: <a title="Edit “#SL ADITI Login Inventory Problem”" href="http://blog.nalates.net/nalates/wp-admin/post.php?post=6715&amp;action=edit">#SL ADITI Login Inventory Problem</a>.

The Outerra Tech Demo was released! See: <a href="http://blog.nalates.net/2012/03/06/planet-sized-video-game/">Planet-sized video game</a>.

More news came out on the Received Items folder.

Invisa-prims shiny breaks.

Rumors of rezoning the mainland started up again this month. See: <a href="http://blog.nalates.net/2012/03/14/second-life-mainland-rezoning/">Second Life Mainland Rezoning?</a> I don’t recall it actually happening.

The new <i>Encroachment Return</i> came out. This became a problem after the 64m prims became possible. One could have the center of a prim on their property and 30m of it encroaching on a neighbor’s property and the neighbor couldn’t do anything about it. That got fixed this year.

Linden Scripting Language syntax tips and tool tips were updated.

llCastRay() was improved.

Direct Delivery launched 3/21. It is a disaster for the next few weeks.

Server updates are falling behind because of problems with the Release Candidate for Multi-Threaded Region Crossing failing. There no roll outs to the main channel most of March. In April it is eventually pulled from RC status and goes into a rewrite and restarts the QA gauntlet.

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<h2>April – 45 Articles</h2>

The first thing we saw in April was the Firestorm team quitting viewer development on April 1. See: <a href="http://blog.nalates.net/nalates/wp-admin/post.php?post=6980">Firestorm Dev’s Quit</a>.

In Direct Delivery people were trying to decide if using folders or boxes for delivery worked better. I’m not at all sure that has been decided even now. This was the month Sassy Romano started a Direct Delivery JIRA log in the SL Forum: <a href="http://community.secondlife.com/t5/Merchants/EXISTING-MARKETPLACE-JIRAS-ISSUE-LOG/td-p/1459899”>Existing Marketplace JIRA’s Issue Log</a>.

It was this month that people began to realize mixing prims and mesh could reduce prim count.

The main SL Viewer gained the ability to import animations via ANIM files. See: <a href="http://blog.nalates.net/2012/04/04/avastar-rigging-and-animation/”>Avastar Rigging and Animation</a>. Kelly Linden announced he was working on a way to eliminate the need for Animation Overriders. I have no idea what became of this project. Later more discussion comes up about the Lab making an AO replacement. See: <a href="http://blog.nalates.net/2012/04/13/sl-the-great-ao-debate/”>#SL The Great AO Debate</a>.

The ban elevation limit was raised to 5,000m in preparation for removing flight limits.

The multi-threaded region crossing code continued to be tested in RC channels. But, this was the month we saw it pulled from the RC channels. It went into rewrite and eventually a new pass through QA that took weeks.

Changes coming to SL were announced; object return was to change so unlinking objects that would drive prim count over the limit and start a flood of returns would be prevented or return just the unlinked prims, selecting objects inside a parcel by a banned avatar would be prevented, an addition to the scripting language that would allow scripted return of objects was opened to discussion, Geenz Spad was working on a new Shine shader that was soon to release, graded shadows were planned to be added, spell checking was to come to the SL Viewer, local textures were to come to the SL Viewer, and libraries used to compile viewers were to be updated.

Andrew Linden first explained how Havok would be used to render the Navmesh for pathfinding. See: <a href="http://blog.nalates.net/2012/04/07/pathfinding-update-week-14/”>PathFinding Update Week 14</a>. A planned pathfinding user group was announced this month. The first meeting was actually the 19<sup>th</sup>. See <a href="http://blog.nalates.net/2012/04/19/sl-pathfinding-news-wk16/”>#SL Pathfinding News Wk16</a> for information on the first meeting.

[caption id="attachment\_7030" align="aligncenter" width="435"]<a href="http://blog.nalates.net/2012/04/07/pathfinding-update-week-14/navmesh\_004wat/" rel="attachment wp-att-7030"><img class="size-full wp-image-7030" alt="Red Showing Navmesh Limit" src="http://blog.nalates.net/nalates/wp-content/uploads/2012/04/Navmesh\_004Wat.jpg" width="435" height="239" /></a> Red Showing Navmesh Limit[/caption]

The Adult Content User Group pretty much dies out this month.

It was this month it was discovered mesh objects start to have a problem maintaining their physics shape. The Lindens started looking for a fix.

A Project Runway viewer was released to help figure out why avatar bake fail happens.

ATI rendering problems with texture compression on were encountered. Eventually a new texture compression feature is added to the viewer.

Work starts on improving the viewer’s memory management. This grows into a nightmare project that plugs the viewer development pipeline late in the year. Microsoft’s Windows code for Skydrive adds to the problem.

The script function llGetAgentList() was rolled out to the RC channels. As does HTTP\_BODY\_MAXLENGTH.

A bug that causes the first click on a prim to fail to trigger a touch event appears.

[caption id="attachment\_7055" align="aligncenter" width="435"]<a href="http://blog.nalates.net/2012/04/12/second-life-interesting/secondlifepromo3/" rel="attachment wp-att-7055"><img class="size-full wp-image-7055" alt="3 - New Promo by Strawberry Singh" src="http://blog.nalates.net/nalates/wp-content/uploads/2012/04/SecondLifePromo3.jpg" width="435" height="295" /></a> 3 - New Promo by Strawberry Singh[/caption]

Strawberry Singh’s art was first used on the Second Life sign up pages as was art by other resident artists like; Harlow Heslop, Miaa Rebane, Ivoni Miles, and siXX Yangtz.. It was a big improvement. See: <a style="font-size: 13px; line-height: 19px;" href="http://blog.nalates.net/2012/04/12/second-life-interesting/”>Second Life Interesting</a>. The use of resident made art continues through the year.

The Lindens plan to change Flight Height. They begin testing to see what, if anything breaks. It takes a few weeks for this to finally roll to the main channel. Nothing breaks.

The region configuration process changed this month. It was no longer necessary to restart a region to make many configuration changes.

The first region rebalancing was completed and Caoyot Linden reports that region crashes decreased by 50%.

Inventory problems continue on the ADITI grid.

In mid April the <a href="http://community.secondlife.com/t5/Inworld/Help-Us-Celebrate-Second-Life-s-9th-Birthday/ba-p/1488731”>Lab announces SL9B</a>… This was the first year in a long time in which the Lab would not be participating and planned to leave the celebration up to residents. There was lots of drama, but the residents put on an awesome party.

The scripting flywheel effect was countered by the Lab to remove an ability to hog scripting time.

Havok licensing issues start to come up this month.

This month it was announced Direct Delivery’s ANS (Automatic Notification System) will be put online. Eventually it mostly works.

This month Oz Linden confirmed the Lab was looking at the SL avatar and figuring out how to improve it. While lots of looking and thinking will go on, the work on it remains rather nebulous through the rest of the year. It will be December 2012 before Oz Linden would say a new Linden will be using new ‘perspectives’ to look at improving the avatar in the first part of 2013.

We get more news on the Mesh Deformer this month as Karl starts to participate in the Metareality podcasts. See my summary here: <a href="http://blog.nalates.net/2012/04/21/sl-mesh-deformer-project-update-wk16/”>#SL Mesh Deformer Project Update Wk16</a>. Another iteration of the Deformer was released in late April. This month we heard about the possibility of a variable base shape for the Deformer for the first time.

Around the end of the month Second Life was scheduled to be off line for a several hours.

Land Impact costs changed to benefit users as Streaming Costs were capped.

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<h2>May - 43 Articles</h2>

I finally figure out the ‘No Room to Sit’ riddle. See: <a href="http://blog.nalates.net/2012/05/01/no-room-to-sit/”>No Room to Sit</a>.

[caption id="attachment\_7240" align="aligncenter" width="435"]<a href="http://blog.nalates.net/2012/05/01/no-room-to-sit/servscript\_004/" rel="attachment wp-att-7240"><img class=" wp-image-7240 " alt="A hollow leaves the inner cube 'outside.'" src="http://blog.nalates.net/nalates/wp-content/uploads/2012/05/ServScript\_004-435x247.jpg" width="435" height="247" /></a> A hollow leaves the inner cube 'outside.'[/caption]

The first week of May Andrew Linden announced they felt the Pathfinding project was feature complete and nearing release.

A new Mesh Deformer Project viewer was released by the Lab in the first week and another later in the month. This month sees the first rumblings of the Mesh Deformer being delayed and dropped in priority because of a lack of test clothes. That shortage continues through the rest of 2012. See: <a href="http://blog.nalates.net/2012/05/08/sl-mesh-defomer-at-risk/”>#SL Mesh Defomer at Risk</a>. However, some test clothes did appear and were placed in Hippo Hollow for all to use. As the Deformer advanced these test clothes would become obsolete. The failure to remove them once outdated caused some confusion. This is also the month that we heard about <i>Alternate Avatar Base Shapes</i> being added to the Mesh Deformer. See: <a href="http://blog.nalates.net/2012/05/26/mesh-deformer-update-from-metareality/”>Mesh Deformer Update from MetaReality</a>. This news lead into a debate among SL users as to which is the best way to proceed. See: <a href="http://blog.nalates.net/2012/05/26/the-great-sl-deformer-debate/”>The Great #SL Deformer Debate</a>.

Skydrive and similar software was found to be the cause of a number of viewer crashes. It triggers some type of memory clash.

A bug popped up where small objects go invisible.

Several SL offline periods were scheduled this month. The Lindens were updating the Operating Systems of all the servers. I suspect the backend server updates were the reason for closing SL.

We saw a bug that was causing adjacent regions to disappear, become invisible. This problem is still occurring in December 2012.

This month we heard about a cleanup of the SL asset database. After an 85% reduction the database was to only 192 terabytes.

We had a bug that shows up this month that caused the avatar to try and wear everything in inventory. The cause was figured out. I’m not sure it has been fixed yet. But, there is a fix one can do when it happens. See: <a href="http://blog.nalates.net/2012/05/11/second-life-wearing-all-inventory/”>Second Life Wearing All Inventory</a>.

The new Local Textures feature came out in the Linden viewer, Beta version I think.

In Pathfinding the problem of static obstacles with doors was run into. This was also the month that <a href="http://blog.nalates.net/2012/05/18/sl-pathfinding-update-week-20/”>#SL Pathfinding Update Week 20</a> came out with the Pathfinding lag drama. I’m not sure we have ever gotten over that.

Region Idling was announced and rolled out to RC channels this month. See: <a href="http://blog.nalates.net/2012/05/15/sl-region-idling/”>#SL Region Idling</a>. The Lindens talked more about it throughout the month. A <a href="http://community.secondlife.com/t5/Second-Life-Server/Region-Idling-FAQ/td-p/1535497”>FAQ</a> page on Idling was added to the SL Wiki. Various concerns discussed were covered in my article: <a href="http://blog.nalates.net/2012/05/19/sl-news-update-week-20/”>#SL News Update Week 20</a>.

At mid month more load balancing was done. The process that restarts regions and decides which server to load them into (Region Conductor) was changed to avoid placing busy regions in the same server. Oskar Linden said it was making a big difference in performance stats.

This month I got hooked on Penny Patton’s idea for a better-looking Second Life. See: <a href="http://blog.nalates.net/2012/05/21/sl-crusade-for-good-looks/”>#SL Crusade for Good Looks</a>.

[caption id="attachment\_7424" align="alignleft" width="210"]<a href="http://blog.nalates.net/2012/05/21/sl-crusade-for-good-looks/pennypic/" rel="attachment wp-att-7424"><img class="size-medium wp-image-7424" alt="Penny Patton's Proportioned Shapes" src="http://blog.nalates.net/nalates/wp-content/uploads/2012/05/PennyPic-210x435.jpg" width="210" height="435" /></a> Penny Patton's Proportioned Shapes[/caption]

It was this month that <a style="font-size: 13px; line-height: 19px;" href="https://jira.secondlife.com/browse/VWR-28416”>VWR-28416</a> was determined to be the reason for bumpy mesh roads. See: <a style="font-size: 13px; line-height: 19px;" href="http://blog.nalates.net/2012/05/22/second-lifes-bumpy-roads/”>Second Life’s Bumpy Roads</a>.

This was the month that Laurence Simon begin posting the hilarious series of <i>Angle of Death</i> videos about SL9B. See: <a href="http://blog.nalates.net/2012/05/23/sl9b/”>SL9B</a>.

Multi-Threaded region Crossing Phase I made it back to the RC channels this month and was expected to roll to the main channel.

I finally found out why people disagree in the face of overwhelming evidence. See: <a href="http://blog.nalates.net/2012/05/28/the-reason-why/”>The Reason Why</a>.

An Avatar Baking Change appeared this month. I think we could have labeled it a proof of concept. The standard avatars in the library began using ‘pre-baked’ appearances in preparation for a Bake Fail fix. See: <a href="http://blog.nalates.net/2012/05/30/sl-news-week-22/”>#SL News Week 22</a>.

Experience Tools using Experience Permissions rolled out to the Magnum RC channel. This lead to Griefer Monday. Oops.

Now we know the tools that eventually rolled out as the Advanced Creator Tools. We consider permissions as either standard permissions or the coming Experience Permissions, which have been rewrite since Griefer Monday.

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<h2>June – 54 Articles</h2>

A Pathfinding Release Candidate channel was created in the main grid and regions were moved to it. Falcon and Lorca Linden provided information on the transition to PF and calmed some of the concerns people had. The need to ‘unfreeze’ the Navmesh before being able to build was removed. llGetStaticPath() was mostly working but undocumented this month. By late June all sandboxes in the main channel were running the Pathfinding code.

We saw some of the first awesome Pathfinding characters this month. Plus the Lab promised to release Pathfinding script templates.

[caption id="attachment\_7636" align="aligncenter" width="425"]<a href="http://blog.nalates.net/2012/06/09/pathfinding-update-week-23/horatio/" rel="attachment wp-att-7636"><img class="size-medium wp-image-7636" alt="Cute Horatio Pathfinding Character" src="http://blog.nalates.net/nalates/wp-content/uploads/2012/06/Horatio-425x435.jpg" width="425" height="435" /></a> Cute Horatio Pathfinding Character[/caption]

The Multi-Thread Region Crossing code for Phase I finally made it through RC testing and rolled to the main channel.

Huseby Linden talks about Experience Tools in the Magnum RC channel. See: <a href="http://blog.nalates.net/2012/06/02/sl-news-week-22-2/”>#SL News Week 22</a>.

Merov Linden found a problem with asymmetric textures, much wider than tall, which failed to completely rez until zoomed in on. Merov had a fix that would be rolling out in the next weeks.

June 4<sup>th</sup> is <a href="http://blog.nalates.net/2012/06/04/greifer-monday/”>Griefer Monday</a>. It is caused by a fail in the Experience Tools permissions. This apparently was an unforeseen weakness in the basic design. The Tools were removed from the grid in an emergency roll back and the project put into a rewrite. As yet, Experience <i>PERMISSIONS</i> have not reappeared on the grid. That indicates a serious rethink and I suspect rewriting of many parts of the SL system. Also see: <a href="http://blog.nalates.net/2012/06/11/griefer-monday-postmortem/”>Griefer Monday Postmortem</a>. Oskar talked about what happens within the Lab when a project fails.

Discussion about Mesh Clothes fitting or not and what needs to be done continued. See my Poll in: Do <a href="http://blog.nalates.net/2012/06/07/do-sl-mesh-clothes-fit/”>#SL Mesh Clothes Fit</a>.

We saw Slee Mayo’s fun new educational toy. It uses the LSL functions for HTTP data queries to make a live near real time map of RL earthquakes in SL.

[caption id="attachment\_7641" align="aligncenter" width="435"]<a href="http://blog.nalates.net/2012/06/10/sl-news-week-23/earthquake\_001/" rel="attachment wp-att-7641"><img class="size-medium wp-image-7641" alt="Earthquake Map" src="http://blog.nalates.net/nalates/wp-content/uploads/2012/06/Earthquake\_001-435x261.jpg" width="435" height="261" /></a> Earthquake Map[/caption]

For those wondering why the Mesh Deformer testing is taking so long, a good article to read is: <a style="font-size: 13px; line-height: 19px;" href="http://blog.nalates.net/2012/06/10/sl-news-week-23/”>SL News Week 23</a>. I discussed Deformer testing problems with Oz Linden. Karl S. talked about coming changes to the Deformer at SL9B. See: <a style="font-size: 13px; line-height: 19px;" href="http://blog.nalates.net/2012/06/22/mesh-deformer-update-week-25/”>Mesh Deformer Update Week 25</a>.

This month we hear about an alternative to the Mesh Deformer. It was and is not ideal, but it works now. See: <a href="http://blog.nalates.net/2012/06/25/sl-mesh-deformer-alternative/”>#SL Mesh Deformer Alternative</a>. We have recently seen this solution appear as Liquid Mesh.

ADITI grid problems continued. See: <a href="https://jira.secondlife.com/browse/SVC-7727”>SVC-7727</a>.

It is this month that the Lab changed emphasis. It shifted from new features to fixing and improving existing features.

I started seeing Mesh Warning/Fail icons in world for the first time this month. See: #SL <a href="http://blog.nalates.net/2012/06/14/sl-pyramid-warning-symbols/”>Pyramid Warning Symbols</a>.

Andrew Linden talked some more about a syntax service for the viewer’s scripting editor. This would allow the editor to pull it’s syntax files from the region server and thus always be up to date. I’m still not sure where this project is.

We also found out that the script size limit, the text size limit, was 65k. Kelly Linden explained the viewer side limit is the restriction, the limit is set in a viewer file: panel\_script\_ed.xml. See <a href="http://blog.nalates.net/2012/06/17/sl-scripting-update-week-24-2/”>#SL Scripting Update Week 24</a> for more information.

<a href="http://jira.secondlife.com/browse/SVC-4444”>SVC-4444</a> was filed in regard to objects becoming full permissions if rezzed in certain ways.

Discussion started on llMatchGroup() and <a href="http://jira.secondlife.com/browse/SCR-79”>SCR-79</a> - <i>Checks If An Object Or Agent Is Active In A Specified Group</i>. We still hear this function asked about. But, for privacy reasons it is not going to happen. See: <a href="http://blog.nalates.net/2012/06/19/update-on-scr-79/”>Update on SCR-79</a>.

The new virtual world Cloud Party entered the awareness of many SL users this month. See: <a href="http://blog.nalates.net/2012/06/23/cloud-party-vs-second-life/”>Cloud Party vs Second Life</a>.

The Lab was rolling out a fix for the problem of not being able to rez things on your own property this month. A quick fix was to have the camera look as straight down as possible when attempting a rez. The problem was a selection issue.

Auto-replace and Spell Check show up in the Beta Viewer.

Baker Linden, a 2012 hire, starts working on <i>Large Groups Editing and Opening</i> problems.

A new roll out process is adopted for server updates. Initially the process is slower but over time it improves. The process allows the OS and simulator software to be updated at the same time.

The end of June we got hit with a Havok update rolled into the RC channel that created region crossing problems. We learned that regions with mismatched versions of Havok were always going to have this problem. Eventually regions in RC’s were rearranged to minimize this problem.

The pre-baked textures for Library avatars made it to a main grid RC channel.

The Content Creation Improvement Informal User Group (CCIIUG) is formed the end of June. See: <a href="https://wiki.secondlife.com/wiki/Content\_Creation\_Improvement\_Informal\_User\_Group”>Group’s home page</a>. The group proves to be a bit irregular about whether it meets.

The last day of June the Lab announced Project Shining. See: <a href="http://blog.nalates.net/2012/06/30/second-life-changes-coming/”>Second Life Changes Coming</a>.

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<h2>July - 45 Articles</h2>

With SL Viewer  3.3.3 (260300) Jun 21 people started to have more problems with large groups. Any group over and near 10,000 members is considered large. When opening these groups the viewer would lock up. See: <a href="http://blog.nalates.net/2012/07/01/sl-viewer-problems/”>#SL Viewer Problems</a>.

Baker Linden struggled with trying to fix the existing Large Group queries. Later in the moth Baker starts moving the query to the new HTTP protocol system.

July was the month when issues with UDP throttling came out. The simple fix is keeping viewer bandwidth set below 1900kbp. See the link immediately above. At the end of the article is a link to a great explanation of the Max Bandwidth setting.

In July Nyx Linden explained the plans for server side avatar baking and announced they are just getting started on the project. It wouldn’t be until December that we get the ETA of late February 2013 for completion of the project.

The first week of July more people are noticing the long roll times for server updates. Oskar explained the longer times are due to the new infrastructure and roll process. See <a href="http://blog.nalates.net/2012/07/03/sl-news-week-26-27/”>#SL News Week 26 &amp; 27</a> for his explanation.

A problem comes to light of phantom prims turning into solid prims. <a href="https://jira.secondlife.com/browse/SVC-8030”>SVC-8030</a>

Falcon Linden announces that Havok version 2012 will be the version used in the viewer to run Pathfinding Tools. He also points out having a SSE2 capable CPU is more and more important for running SL.

<a href="http://blog.nalates.net/2012/07/29/sl-viewer-updates-week-30/”>Pathfinding Tools</a> made it into the Dev Viewer. More regions are added to the PF-RC channel in the main grid.

Nyx Linden discussed the collision bone alternate to the Mesh Deformer. The only real information was that the Lindens are taking a serious look at it. As the year progresses the process looks less desirable.

I find out in July that the standard SL skeleton has 77 bones and that it may be possible to animate all 77.

Word came out that the hardware upgrade continued moving forward.

CCIIUG had its first meeting. It was announced that this was a chance for fashion designers to contribute to the development of SL. In hindsight I should have taken it to be an example of how programmers and artistic designers have so little common ground on which to communicate. See <a href="http://blog.nalates.net/2012/07/04/content-creation-improvement-ug/”>CCIIUG</a>.

Network issues stopped a roll out and blocked logins in the second week of July. It was quickly fixed but threw off the rollout schedule.

Discussion on region crossing issues because of mismatched Havok versions continues. Several possible solutions to mitigate the problems were discussed. Eventually RC channels are rearranged to reduce problems. SL sailors were having problems with their events. So, the Blake Sea regions were moved into a single channel. The problems came from the Havok upgrade needed for Pathfinding, which was taking a long time to pass RC testing.

The scripting user group closed this month. Kelly folded it into Andrew’s Server &amp; Scripting group, which later folded into Maestro’s Beta Server group.

Maestro Linden announced that <a href="http://blog.nalates.net/2012/07/09/sl-aditi-fixed/”>SVC-7727</a> was fixed. That turned out to be not completely true… the specific problem was fixed but login and inventory problems continued. One must keep changing passwords and waiting 24 to 48 hours until the problem clears up on their account. It is a tedious trial and error, but it is a work-around.

In July the One Voice fund raiser is run for Gala Phoenix’s legal fund to fight a flagrant case of DMCA abuse. See: <a href="http://blog.nalates.net/2012/07/09/fund-raiser-dmca-abuse/”>Fund Raiser DMCA Abuse</a> and <a href="http://blog.nalates.net/2012/07/10/n-core-at-fund-raiser/”>N-Core at Fund Raiser</a>.

SLCC, the annual community convention is canceled. See: <a href="http://blog.nalates.net/2012/07/10/avacon-abandons-slcc-2012/”>AvaCon Abandons SLCC 2012</a>.

The subject of a consensus on the Mesh Deformer came up. I took a poll to see what people were thinking. See: <a href="http://blog.nalates.net/2012/07/10/the-consensus/”>The Consensus</a>.

Torley Linden put out a new video tutorial.

[youtube=http://www.youtube.com/watch?v=QA0s1AtF5Fs]

Google ended their free translation service in December 2011. In July Microsoft ended theirs. See: <a href="http://blog.nalates.net/2012/07/15/second-life-translation-bump/”>#Second Life Translation Bump</a>.

In July we start to learn that Linden Lab’s SL Viewers will be less and less compatible with OpenSim grids.

In July the Firestorm Viewer became the most stable viewer available for Second Life. It will continue to hold that position for the remainder of the year.

The Advanced Creator Tools rollout to the main channel. See: <a href="http://blog.nalates.net/2012/07/17/second-life-news-week-29/”>Second Life News Week 29</a> and  SL Blog: <a href="http://community.secondlife.com/t5/Featured-News/First-Set-of-Advanced-Creator-Tools-Launched-Today/ba-p/1618627?utm\_source=Blog&amp;utm\_medium=Story&amp;utm\_campaign=SocialCM”>First Set of Advanced Creator Tools Launched Today</a>.

This month we heard more rumors of Runitia Linden working on the viewer’s render pipeline.

Simon Linden added a feature to the viewer’s script editor. Start typing a function or event name and then wait for the tool tip. Then press TAB to have it injected into the code. Try it then it will make sense.

In July I published some stats about the users of my blog. See: <a href="http://blog.nalates.net/2012/07/18/some-stats-on-second-life-users/”>Some Stats on Second Life Users</a>.

Cloth simulation comes up in <a href="http://blog.nalates.net/2012/07/19/content-creation-improvement-user-group-week-29/”>CCIIUG</a>. We won’t see it for some time in SL. I think years.

Oskar Linden explained the <a href="http://blog.nalates.net/2012/07/20/sl-server-update-week-29/”>hectic schedule</a> around rollouts.

Rumors on the Materials System were taking on more body in July. Eventually the rumors prove true.

The first articles on the imminent <a href="http://blog.nalates.net/2012/07/23/phoenix-viewer-closeout/”>demise of the Phoenix Viewer</a> appear. My article gets into the reasons and the new features coming to SL that spell the end of Phoenix.

The consolidation from 3 to 2 data centers continued and complicated the third week’s rollouts. To some extent it also confused the region organization previously done to improve performance.

A new <a href="http://blog.nalates.net/2012/07/31/new-sl-project-viewer/”>HTTP Project Viewer</a> was released in July.

More people suffered the problem of mixed up images in the Market Place.

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<h2>August – 55 Articles</h2>

In August a failure in the wiki forced a restore from backups. Lots of article editing was lost.

In CCIIUG discussion on a better build panel starts. It would probably have been more interesting if people had known it was related to the coming Materials System, which was still a secret project. A case of really bad timing and trying to have the horse push a cart. But a couple of weeks later the Materials System is announced and the <a href="http://blog.nalates.net/2012/08/17/content-creation-improvement-week-33/”>real revisions needed begin to be discussed</a>. Later in the month we started to get more information on <a href="http://blog.nalates.net/2012/08/21/content-mesh-ug-week-34/”>how the Materials System would work</a>. I thank many realized what a huge push this new feature would be on old viewers.

More questions were <a href="http://blog.nalates.net/2012/08/28/sl-content-mesh-week-35/”>answered about the Materials System</a> in the Content-Mesh UG meeting.

Kelly Linden demonstrates <a href="http://blog.nalates.net/2012/08/09/html-huds/">HTML HUD</a>’s.

Baker completed most of the server side fix for Large Group Editing in early August. He was looking forward to it passing QA in ADITI. He was still new. The rest of the month Baker would be debugging the code. By the third week he was redoing the process. By the end of the month he confirmed there would be no chance of backward compatibility and the UDP API for groups would be abandoned. See: <a href="http://blog.nalates.net/2012/08/25/sl-group-edit-update-week-34/”>#SL Group Edit Update Week 34</a>.

The idea of editing groups to allow culling by Last Login Data was rejected as too risky.

The idea of <a href="http://blog.nalates.net/2012/08/04/virtual-landmarks/”>Virtual Landmarks</a> arrived this month.

In the first week of August I published an article on the <a href="http://blog.nalates.net/2012/08/04/sl-direct-delivery-market-place/”>frustrating state of Direct Delivery</a> and the Market Place. We had been hearing about it since April 2011. People were and are still very frustrated with the Market Place and Direct Delivery.

In the second week of August Linden Lab <a href="http://blog.nalates.net/2012/08/05/second-life-viewer-change/”>changes the SL Viewer</a> and effectively blocks it use on any grid other than the Lab’s Second Life. The restriction is due to the constraints of the license the Lab has with Havok.

From the Shining Project the HTTP Library is made open to Third Party Developers for testing.

The Linden people started looking at adapting the SL Viewer to Apple’s then new Mountain Lion system. By December they will be looking at adapting to Apple’s Cocoa system.

By the second week of August the Havok License was still incomplete and undecided.

The idea of using <a href="http://blog.nalates.net/2012/08/07/looking-ahead-week-32/”>Click-to-Walk and Pathfinding</a> was rejected. Pathfinding can appear unpredictable and that was considered unacceptable for new users.

[caption id="attachment\_8160" align="aligncenter" width="435"]<a href="http://blog.nalates.net/2012/08/08/second-life-player-retention-week-32/orientation\_001/" rel="attachment wp-att-8160"><img class="size-full wp-image-8160" alt="The Inspiring Orientation - Learn to Fly" src="http://blog.nalates.net/nalates/wp-content/uploads/2012/08/Orientation\_001.jpg" width="435" height="275" /></a> The Inspiring Orientation - Learn to Fly[/caption]

In August we saw privately owned <a style="font-size: 13px; line-height: 19px;" href="http://blog.nalates.net/2012/08/08/second-life-player-retention-week-32/”>new orientation type regions</a> for new users appearing.

We were getting a huge amount of <a href="http://blog.nalates.net/2012/08/08/second-life-pathfinding-performance/”>misinformation on Pathfinding performance</a> and its effect on regions in general. Some of the sources were unexpected. The ideas around <a href="http://blog.nalates.net/2012/08/09/sl-server-news-week-32/”>‘disabling’ Pathfinding</a> were highly misleading. We also find out there is a <a href="http://blog.nalates.net/2012/08/11/pathfinding-costs/”>minimum Land Impact cost for each Pathfinding character</a>. The <a href="http://blog.nalates.net/2012/08/31/sl-pathfinding-update-week-35/”>Pathfinding Tools</a> got caught in viewer limbo due to unrelated memory leak problems in the viewer and were delayed.

A problem comes up with <a href="http://blog.nalates.net/2012/08/12/second-life-traffic-numbers/”>Traffic Counts</a> - <a href="https://jira.secondlife.com/browse/SVC-8099”>SVC-8099</a>. Since it affects search results it was big drama. <a href="http://blog.nalates.net/2012/08/13/second-life-news-update-week-32/”>Andrew Linden talked about Traffic Counts</a> in a week 32 meeting.

In the third week of August the Lab posts a page with 5 videos on <a href="http://blog.nalates.net/2012/08/12/more-on-what-is-second-life/”>What is Second Life</a>.

<a href="http://www.youtube.com/watch?list=PLA4A56B2AB33F7723&amp;feature=player\_embedded&amp;v=r74hkI-JcHY">http://www.youtube.com/watch?list=PLA4A56B2AB33F7723&amp;feature=player\_embedded&amp;v=r74hkI-JcHY</a>

Andrew explained how the <a href="http://blog.nalates.net/2012/08/13/second-life-news-update-week-32/">camera and avatar position affect the Interest List</a>, what you can see. I think this was before Andrew started redoing the Interest List code.

Tiberious Neruda posted a JIRA feature request regarding problems with rigged mesh and the SL Skeleton. I tried to explain it in: <a href="http://blog.nalates.net/2012/08/13/sl-mesh-update-week-33/">#SL Mesh Update Week 33</a> - New JIRA Feature Request.

Around mid August bandwidth use skyrocketed which created a <a href="http://blog.nalates.net/2012/08/14/sl-news-week-33/">big problem for those with capped Internet service</a>. It took weeks to fix the problem. A fix was found about week 33 (8/20) but still had to make it through QA. By August 24<sup>th</sup> the fix made it to the <a href="http://blog.nalates.net/2012/08/24/bandwidth-problem-update/">RC channels</a>. However, a <a href="http://blog.nalates.net/2012/08/24/bad-news-on-bandwidth/">bug in permissions</a> kept that package from rolling out as hoped.

Also around mid month the Pathfinding and Havok update has rolled to all channels. Thus the region crossing problems diminished.

LlHTTPRequest got a new option HTTP\_CUSTOM\_HEADER.

Baker announced that the Large Group Editing changes were not going to be backward compatible. This meant older viewers would be limited to working with groups of 10k or less.

In mid August Nala Spires published the results of testing to find <a href="http://blog.nalates.net/2012/08/15/viewer-performance/">what most affects viewer performance</a>.

About August 17<sup>th</sup> the <a href="http://blog.nalates.net/2012/08/16/second-life-materials-system-announced/”>Materials System was formally announced</a>.

<a href="http://www.youtube.com/watch?v=pr3AP\_DADAY&amp;feature=player\_embedded”>http://www.youtube.com/watch?v=pr3AP\_DADAY&amp;feature=player\_embedded</a>

The Lab announced that <a href="http://blog.nalates.net/2012/08/16/second-life-going-to-steam/”>SL would be available on Steam</a>.

Osker Linden announced Phase II of the Multi-Threaded Region Crossing project had entered QA in ADITI.

Oz Linden confirmed that <a href="http://blog.nalates.net/2012/08/20/sl-news-update-week-33/">Second Life Viewer Plugins</a>, for all practical purposes, are off the table.

In August some third party viewer developers start dropping support for OpenSim.

[caption id="" align="aligncenter" width="384"]<a href="http://s744.beta.photobucket.com/user/Nalates/media/Blog%20Stuff/FSSupport1\_001.jpg.html" target="\_blank"><img style="border: 0px;" alt="FS Landing" src="http://i744.photobucket.com/albums/xx90/Nalates/Blog%20Stuff/FSSupport1\_001.jpg" width="384" height="266" border="0" /></a> Firestorm Viewer Support Island[/caption]

The <a href="http://blog.nalates.net/2012/08/23/firestorm-support-island-opening/">Firestorm team opened their support island</a>: <a href="http://maps.secondlife.com/secondlife/Phoenix%20Firestorm%20Support/48/162/26">Phoenix-Firestorm Support</a>. This is very much a new user orientation and training island.

I wrote up my first look at the <a href="http://blog.nalates.net/2012/08/23/scripting-news-week-34/">Pathfinding template scripts</a> the Lab released. It has a great video explaining gimbal lock.

<a href="http://blog.nalates.net/2012/08/27/photo-tools-for-second-life/">Photo Tools for Second Life</a> started to appear in Third Party Viewers.

Andrew Linden gave us a <a href="http://blog.nalates.net/2012/08/28/sl-content-mesh-week-35/">detailed explanation of the mesh road bumps</a> problem.

More problems with <a href="http://blog.nalates.net/2012/08/30/sl-mesh-uploading-update/">Mesh model uploading</a> were fixed.

Another Havok update started its way through QA the end of August.

Frustration about the time it is taking to develop the <a href="http://blog.nalates.net/2012/08/31/mesh-deformer-status-week-35/">Mesh Deformer</a> surfaces.

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<h2>September – 59 Articles</h2>

Baker Linden announced that he had Large Group downloads working consistently. He was starting to work with Oz to get a project viewer out. A few days later a <a href="http://blog.nalates.net/2012/09/08/group-edit-update-week-36/”>Large Groups Project Viewer</a> rolled out. <a href="http://blog.nalates.net/2012/09/12/group-edit-update-week-37/”>Another version</a> rolls out later. On the 18<sup>th</sup> <a href="http://blog.nalates.net/2012/09/18/sl-group-edit-roll-to-rc/”>Large Group Editing</a> made it to the RC channels.

A fix is released to Linden Support to fix inventory problems where folders appear out side the main root folder.

A <a href="http://blog.nalates.net/2012/09/02/new-mesh-deformer-project-viewer/”>Mesh Deformer Project viewer</a> was released. It used the then new feature of allowing the user to decide which base avatar model to use. Another was released <a href="http://blog.nalates.net/2012/09/08/mesh-deformer-update-36/”>a few days later</a>. The later one made all previous rigged mesh for the deformer obsolete. The need for testing clothes became acute this month and I believe began delaying the Mesh Deformer project. Darien Caldwell did a test of the then recently released version of the Mesh Deformer. See the video:

[youtube 1wnBB7c5NfM]

See my <a href="http://blog.nalates.net/2012/09/21/mesh-deformer-test/”>Second Life Mesh Deformer Test</a> for the details. Later in September more <a href="http://blog.nalates.net/2012/09/24/sl-mesh-deformer-discussion/”>Mesh Deformer discussion</a> occurred about how the Deformer works and what could be expected.  September 25<sup>th</sup> we got another release of the <a href="http://blog.nalates.net/2012/09/25/sl-news-1-week-39/”>Mesh Project Deformer</a>. Toward the end of the month there was more discussion about having <a href="http://blog.nalates.net/2012/09/26/sl-news-2-week-39/”>multiple base models</a> for the Deformer to work from.

People are starting to look at Windows 8 and Second Life in September.

September 9<sup>th</sup> sees the <a href="http://blog.nalates.net/2012/09/06/oh-crap-jira-change/”>JIRA CHANGE</a>. This was big drama.

Due to roll out problems and the bandwidth problems Oskar Linden explained about how <a href="http://blog.nalates.net/2012/09/07/sl-news-update-3-week-36/”>fast track rollouts</a> work.

[caption id="attachment\_8789" align="aligncenter" width="435"]<a href="http://blog.nalates.net/2012/10/12/sl-news-2-week-41/wind\_001/" rel="attachment wp-att-8789"><img class="size-medium wp-image-8789" alt="Wind Vectors Displayed - Red Lines" src="http://blog.nalates.net/nalates/wp-content/uploads/2012/10/Wind\_001-435x270.jpg" width="435" height="270" /></a> Wind Vectors Displayed - Red Lines[/caption]

Andrew Linden did some work on <a style="font-size: 13px; line-height: 19px;" href="http://blog.nalates.net/2012/09/09/sl-news-final-for-week-36/”>SL Wind</a>. The changes were on ADITI. The changes to Interest List processing were still in progress.

Some users had noticed an apparent problem with <a href="http://blog.nalates.net/2012/09/09/scripting-week-36/”>llCastRay()</a>. Andrew Linden explained away some of the confusion.

The <a href="http://blog.nalates.net/2012/09/10/sl-news-week-37/”>JIRA CHANGE</a> remained a topic of discussion in SL user groups.

Nyx Linden asked those with <a href="http://blog.nalates.net/2012/09/10/sl-news-week-37/”>complex avatars volunteer</a> for testing server side avatar baking.

A <a href="http://blog.nalates.net/2012/09/10/sl-news-week-37/”>mesh physics limit</a> is discovered and discussed.

Unfounded rumors persist about Pathfinding affecting region performance. <a href="http://blog.nalates.net/2012/09/13/interesting-sl-things-in-the-background/”>New Viewer Statistics</a> were added to the viewer to display Pathfinding related performance factors. The Lindens explain again that disabling Pathfinding has no effect on region performance, it only keeps out Pathfinding characters. The Lindens released a more polished PF Kit: <a href="https://wiki.secondlife.com/wiki/Modular\_Pathfinding\_Kit”>Modular Pathfinding Kit</a>. For more links on Pathfinding see my <a href="http://blog.nalates.net/2012/09/19/pathfinding-update-week-38/”>Week 38</a>. In week 39 the <a href="http://blog.nalates.net/2012/09/24/pathfinding-events-change/”>Pathfinding Events changed</a>.

[caption id="attachment\_8594" align="aligncenter" width="435"]<a href="http://blog.nalates.net/2012/09/19/pathfinding-update-week-38/pfimage\_002/" rel="attachment wp-att-8594"><img class="size-full wp-image-8594" alt="Pathfinding" src="http://blog.nalates.net/nalates/wp-content/uploads/2012/09/PFimage\_002.jpg" width="435" height="272" /></a> Pathfinding[/caption]

Feature requests were added to the JIRA. One was for the number of groups you have joined to be displayed somewhere in the Panel. Another was to add a Go To Line# feature to script editor.

In #SL CCIIUG Week 37 Oz discussed some of the challenges in deciding how to <a href="http://blog.nalates.net/2012/09/16/sl-cciiug-week-37/”>control Materials from the build panel</a>.

In another meeting Oz Linden discussed the unlikely possibility of the Lab doing a <a href="http://blog.nalates.net/2012/09/16/sl-viewer-3-4-x-week-37/”>64-bit Second Life Viewer</a>.

The week of September 19<sup>th</sup> the bandwidth fix finally made it to the main channel.

Region state save on restart seemed to goof up in September. Simon and Kelly Linden were tracking down the problem.

See Drongle McMahon’s: <a href="http://community.secondlife.com/t5/Mesh/Single-convex-hull-physics-weights-long-and-technical/m-p/1668273#M16834”>Single convex hull physics weights</a> (long and technical) for the reason bumpy mesh roads may never be fixed. I think it is at this point it was realized the Lindens were not going to be able to fix this problem.

September was the month when the Lindens described the fix for avatar-bake-fail as a server side compositing service. Near the end of the month Oz Linden explained out the Lab expected it to work and their ideas for implementing it. See: <a href="http://blog.nalates.net/2012/09/28/server-side-avatar-baking/”>Server Side Avatar Baking</a>.

[caption id="attachment\_8574" align="aligncenter" width="435"]<a href="http://lindenlab.com/"><img class="size-full wp-image-8574 " title="LLNew" alt="" src="http://blog.nalates.net/nalates/wp-content/uploads/2012/09/LLNew.jpg" width="435" height="138" /></a> 2 new Products from Linden Lab[/caption]

September is the month the new <a href="http://blog.nalates.net/2012/09/18/new-linden-lab-projects/”>Linden Lab Projects</a> were officially announced.

Memory leaks continue to hold up 3.4.x viewer development. That is holding up release of the Pathfinding Tools. By the end of the month the problem was still unresolved.

Another update of Havok was working its way toward the RC channels. Andrew and Falcon Linden were figuring out how to minimize region-crossing problems during testing.

In September we heard the Lindens were still kicking ideas around internally about how to improve chat. We may see something happen in 2013… may.

In talking with Nyx Linden about <a href="http://blog.nalates.net/2012/09/25/sl-news-1-week-39/2/”>pivot points for mesh</a>, then post JIRA Chage, we learned the best way to shift priority on a feature or bug is to keep bringing it up in the Content-Mesh meeting.

Andrew Linden told us he expected the V1 World Map API to be shut down when the Avatar Bake process rolls out. So, we can expect that to happen in early 2013. He was anticipating setting up some regions in ADITI with all the old API’s removed for testing viewers. SL is complex enough no one knows what changes will affect which other parts. It was and is a try it and see process.

Andrew pointed out that it may be possible to turn off mini map data for a region, which could improve game play in combat regions.

<a href="http://blog.nalates.net/2012/09/26/sl-news-2-week-39/”>Large regions</a> was discussed at a Server and Scripting meeting.

Near the end of the month we start to hear of <a href="http://blog.nalates.net/2012/09/29/new-lag-problem/">Sudden Massive Lag</a> and crashing events. See the SL Forum thread: <a href="http://community.secondlife.com/t5/Second-Life-Server/Increase-in-Instant-SIM-LAG-amp-Crashes-During-Larger-Events/m-p/1684143#M7647">Major Increase in Instant SIM LAG &amp; Crash during large events</a>.

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<h2>October</h2>

A problem with a rollout causes over a 1,000 regions to have to be recovered from backups. The RC channel Le Tigre was expected to get the package for Large Group Editing was where the problem strikes. The following week we got more information. Something in the package was <a href="http://blog.nalates.net/2012/10/05/sl-large-group-edit-update-wk40/”>miscalculating Prim Count</a> and forcing the return of prims. Basically that was decimating regions. The mistake inspired the Lindens to create a process for doing massive restorations automatically.

The Large Group Edit was supposed to make it into an RC channel. Because of a prim counting problem that is mixed in with that update the package was pushed back to QA. Simon Linden explained <a href="http://blog.nalates.net/2012/10/10/sl-news-1-week-41/”>how packaging works</a>.

On the 8<sup>th</sup> Treet.TV broadcast their interview with Lorca, Maestro, and Falcon Linden about pathfinding. My summary of the interview is: <a href="http://blog.nalates.net/2012/10/09/treet-tvs-pathfinding-episode/”>Treet TV’s Pathfinding Episode</a>.

On the 10<sup>th</sup> the Lab released their new game Patterns.

The Lab asked for <a href="http://blog.nalates.net/2012/10/05/sl-viewer-3-4-x-week-40/”>more users to test the Beta viewer</a>. They thought they had the memory leak fixed.

Simon Linden took the <a href="http://blog.nalates.net/2012/10/09/sudden-lag-on-the-radar/”>Sudden Massive Lag problem</a> seriously.

The 54m object linking bug fix is announced, buy some saw it as a feature.

On the 11<sup>th</sup> <a href="http://community.secondlife.com/t5/Merchants/To-RODVIK-Request-meeting-with-Merchants-on-CommerceTeam/m-p/1697025#M28329”>Rod Humble posts</a> in the forum thread: <i>To RODVIK - Request meeting with Merchants on Commerce Team concerns</i>. I cover the thread in: <a href="http://blog.nalates.net/2012/10/13/second-life-market-place/”>Second Life Market Place</a>. As of December I have yet to see any improvement in the Commerce Team’s communications as Rod suggested was possible.

By the 12<sup>th</sup> we have another Beta Viewer with the long hoped for memory leak fixed. This memory leak is a problem down in the Microsoft compiler’s use of a memory allocation function. The use of Skydrive aggravates it to point of making the viewer unusable.

SL residents Magus Freston and Darien Caldwell cooperated and made a <a href="http://blog.nalates.net/2012/10/12/new-sl-mesh-import-information/”>viewer to fix a mesh import problem</a>.

[caption id="attachment\_8808" align="aligncenter" width="435"]<a href="http://blog.nalates.net/nalates/wp-content/uploads/2012/10/mknowles\_2fc9a74424.jpg"><img class="size-full wp-image-8808" title="mknowles\_2fc9a74424" alt="" src="http://blog.nalates.net/nalates/wp-content/uploads/2012/10/mknowles\_2fc9a74424.jpg" width="435" height="326" /></a> Lots of PING - Image by: mknowles Flickr[/caption]

We got an explanation of <a href="http://blog.nalates.net/2012/10/14/second-life-viewer-statistics-ping/”>how PING is measured in Viewer Statistics</a>.

By the rolls around the 14<sup>th</sup> the Large Group Editing package had not made it out of QA.

Andrew Linden explained <a href="http://blog.nalates.net/2012/10/14/sl-news-3-week-41/”>how the camera behavior would change</a> with the arrival of the new Interest List code.

Honor McMillian found <a href="http://blog.nalates.net/2012/10/15/mesh-rendering-quirk/”>a glitch in how the viewer renders mesh objects</a>.

On Inara Pey’s blog <a href="http://blog.nalates.net/2012/10/15/rumors/”>Rod Humble confirmed Linden Lab is looking at being involved in more virtual worlds</a>, with the plural being deliberate.

The 16<sup>th</sup> saw RC channels get 3 new packages. None contained the Large Group Editing fixes. A new <a href="http://blog.nalates.net/2012/10/18/scripting-server-news-week-42/”>Havok version 2012.1 rolled out to RC</a>. The Lindens had rearranged regions to minimize region-crossing problems from the version difference. No fixes for the Sudden Massive Lag problems event managers were seeing.

The wiki was updated to point out that failing to click Analyze during mesh upload would result in <a href="http://blog.nalates.net/2012/10/18/scripting-server-news-week-42/”>double sided objects</a>.

On the 18<sup>th</sup> I covered a problem discovered when using arbitrary shapes. See: <a href="http://blog.nalates.net/2012/10/18/mesh-deformer-update-week-42/”>Mesh Deformer Update Week 42</a>.

The Commerce Team posted an update on the Market Place. <a href="http://community.secondlife.com/t5/Merchants/Merchant-Update-October-2012/m-p/1704699”>Merchant Update October 2012</a>. There was no update in November or December… In December there was a request for feedback on Market Place categories: <a href="http://community.secondlife.com/t5/Merchants/Be-Heard-Proposed-New-Marketplace-Categories/td-p/1732083”>Proposed New Marketplace Categories</a>.

On the 22<sup>nd</sup> we heard about another <a href="http://blog.nalates.net/2012/10/22/sl-news-3-week-42/”>reorganization of regions</a>. The consolidation of data centers contributed to the need to make another organizing pass.

We also got word that Runitai Linden is working to have the <a href="http://blog.nalates.net/2012/10/22/second-life-news-1-week-43/”>viewer do a better job of recognizing video card features</a>.

On the 23<sup>rd</sup> we got a warning from Kelly Linden about <a href="http://blog.nalates.net/2012/10/23/alert-le-tigre-httprequest-change/”>a change in HTTPRequest</a>.

Also, we saw a <a href="http://blog.nalates.net/2012/10/23/sl-chui-quick-review/”>CHUI Project viewer arrive</a>. CHUI=Chat Hub User Interface.

On the 25<sup>th</sup> the <a href="http://blog.nalates.net/2012/10/25/sl-large-groups-edit-week-43/”>Large Groups Edit package</a> had to be rolled back again. A <a href="http://blog.nalates.net/2012/10/29/sl-news-2-week-43/”>special roll</a> was made the sort of backup channel Snacks. Baker told us things worked pretty well in Snacks, but a couple of problems were revealed. <a href="http://blog.nalates.net/2012/10/30/sl-news-1-week-44/”>Kelly and Simon’’s HTTP stack changes</a> seemed to make things better.

<a href="http://blog.nalates.net/2012/10/29/sl-news-2-week-43/”>Open Source UG</a> meeting times change.

<a href="http://blog.nalates.net/2012/10/29/sl-news-2-week-43/”>Mesh Deformer limits</a> were pointed out by Darien Caldwell.

Andrew Linden’s <a href="http://blog.nalates.net/2012/10/29/sl-news-2-week-43/2/”>Interest List changes arrive</a> on the ADITI grid.

The Sudden Massive Lag at events is still with us. RC rollouts the last week of October are supposed to help with or resolve the problem.

Expiring group notices remain a problem.

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<h2>November – 39 Articles</h2>

We got <a href="http://blog.nalates.net/2012/11/02/sl-materials-system-update/”>more information on how the Materials System</a> would be implemented. The server side of the system was running in ADITI.

The <a href="http://blog.nalates.net/2012/11/02/sl-news-2-week-44/”>Large Group Editing package rolled out</a> to the Magnum RC channel the first week of November. It stays in RC into the 2<sup>nd</sup> week, but was running in all 3 channels.

The ability to disable collisions by region has been broken for a long time. That was fixed.

We find out that the memory leak problem is still holding up viewer development. About mid month we got word that the Beta viewer would advance from 3.4.2 to 3.4.3, which meant the memory leak was fixed…

A <a href="http://blog.nalates.net/2012/11/02/sl-news-2-week-44/”>feature request for Collada Export</a> comes up.

On the 5<sup>th</sup> we get word that <a href="http://blog.nalates.net/2012/11/05/oskar-linden-gone/”>Oskar Linden no longer works at the Lab</a>. On the 9<sup>th</sup> we get word Maestro Linden will <a href="http://blog.nalates.net/2012/11/09/sl-news-2-week-45/”>take over the Sever Beta user group</a>.

At the Content-Mesh UG Nyx Linden provided more information on the <a href="http://blog.nalates.net/2012/11/05/second-life-render-metadata/”>Second Life Viewer’s rendering metadata</a>.

On the 7<sup>th</sup> Havok 2012.1 rolls out to the main channel.

Restrictions on rezzing objects larger than 256x256x10m are tested to stop some griefing problems.

Runitai Linden releases a test viewer related to <a href="http://blog.nalates.net/2012/11/06/sl-mesh-uploader-change/”>mesh upload problems.</a>

Caleb Linden mentioned that Phase II of the multi0threaded Region-Crossing project is running in ADITI.

[caption id="attachment\_8994" align="aligncenter" width="435"]<img class=" wp-image-8994 " title="WMap3" alt="" src="http://blog.nalates.net/nalates/wp-content/uploads/2012/11/WMap3.jpg" width="435" height="351" /> Missing Map Strips[/caption]

November is the month people started to have <a href="http://blog.nalates.net/2012/11/13/second-life-world-map-borked/”>problems with the world map</a>.

On the 13<sup>th</sup> the <a href="http://blog.nalates.net/2012/11/14/sl-large-groups-edit-rolled-out/”>Large Group Edit rolled out to the main channel</a>. There were some less than accurate announcements of the event.

Second Life Development 3.4.3 (267007) Nov 14 2012 viewer had the <a href="http://blog.nalates.net/2012/11/15/sl-news-1-week-46/”>Large Group Editing feature</a> for the viewer side and the HTTP Protocol updates.

The <a href="http://blog.nalates.net/2012/11/15/sl-news-1-week-46/”>Friday meeting of the Server &amp; Scripting</a> group in AGNI is folded into the Server Beta group meetings held on Thursdays in ADITI.

Andrew Linden demonstrated how to see what the <a href="http://blog.nalates.net/2012/11/15/sl-news-1-week-46/”>Interest List changes</a> are doing.

Interest in the Mesh Deformer, from the Lab’s side of things, looks to be decreasing.

More <a href="http://blog.nalates.net/2012/11/18/sl-aditi-grid-problems/”>problems with the ADITI grid</a> come up. Seems disks are filling up. It is not a simple matter of getting a bigger drive. New hardware is ordered, but it won’t arrive until early 2013.

[caption id="attachment\_9032" align="aligncenter" width="435"]<img class="size-medium wp-image-9032" title="MDRotate" alt="" src="http://blog.nalates.net/nalates/wp-content/uploads/2012/11/MDRotate-435x329.jpg" width="435" height="329" /> Blender 2.64a - Transform/Rotation[/caption]

On the 19<sup>th</sup> I publish an article reviewing <a href="http://blog.nalates.net/2012/11/19/sl-mesh-deformer-update-week-48/”>Second Life mesh and Blender</a>. The article explained how to build dynamic links to project viewers.

On the 26<sup>th</sup> to problem of the <a href="http://blog.nalates.net/2012/11/26/sl-mesh-deformer-status-ii-week-48/”>Mesh Deformer being slow</a> comes up. Some problems with using the collision bones for deforming came out too.

The 27<sup>th</sup> we got information about a <a href="http://blog.nalates.net/2012/11/27/sl-news-week-48/”>server side memory leak</a> aggravated by rebuilding the Navmesh.

World maps problems are still with us, but not as bad.

About the 29<sup>th</sup> a rollout caused the <a href="http://blog.nalates.net/2012/11/29/sl-news-2-week-48/”>offline-emails notices to start failing</a>, triggering a roll back.

The end of November White Rabbit showed me how the <a href="http://blog.nalates.net/2012/11/30/sl-mesh-deformer-new-twist/”>Mesh Deformer can be used to animate a face</a>.

A private individual provides <a href="http://blog.nalates.net/2012/12/03/sl-virtual-landmarks/”>Virtual Landmarks to Second Life</a>.

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<h2>December – 33+ Articles</h2>

<a href="http://blog.nalates.net/2012/12/05/sl-best-practices/”>Second Life Best Practices for Building</a> is updated in the SL Wiki.

The Lindens continued to work on a fix for offline-email failing to send.

The RC’s are running simple bug fix packages. No-Change-Windows came into play so little else would change this year 2012.

ADITI had a problem with free Linden$ not distributing. That got fixed. The new hardware has not arrived so disk keep filling up.

The BIG announcement in December is Server-Side Avatar Bake is planned to rollout in late February 2013. That spells the end of old viewers not being updated.

[caption id="attachment\_7287" align="aligncenter" width="435"]<img class="size-full wp-image-7287" alt="Crying Leo by storyvillegirl on Flickr" src="http://blog.nalates.net/nalates/wp-content/uploads/2012/05/storyvillegirl\_e307e3e53f.jpg" width="435" height="290" /> Crying Leo by storyvillegirl on Flickr[/caption]

A <a href="http://blog.nalates.net/2012/12/11/from-sl-griefing-to-extortion/”>griefing and extortion</a> issue hit the fan. Protesters disrupted user group meetings.

<a href="http://blog.nalates.net/2012/12/12/sl-news-week-50/”>The Sudden Massive Lag problem</a> was hitting Linden user group meetings.

A new CHUI Project Viewer was released.

About the 18<sup>th</sup> we got the last rollout to the main grid. The big Magnum package made it out. The Lindens are <a href="http://blog.nalates.net/2012/12/18/sl-news-2-week-51/”>hoping this has a fix for the Sudden Massive Lag</a>.

We heard that Experience Permissions are still in progress after some delay.

<a href="http://blog.nalates.net/2012/12/18/sl-news-2-week-51/”>Interest List code is in QA</a> and headed toward an RC channel.

On the 19<sup>th</sup> a load test was done to test Phase II of Multi-Threaded Region-Crossing in ADITI.

On the 20<sup>th</sup> we got <a href="http://blog.nalates.net/2012/12/20/sl-news-3-week-51/”>more information</a> on things coming for 2013.

The 22<sup>nd</sup> a new <a href="http://blog.nalates.net/2012/12/22/chui-project-viewer-update/”>CHUI Viewer</a> was released.

<h2>Summary</h2>

2012 was far busier than I thought.