Jinx

Jinx is a **Java** application which, in theory at least, should run on most modern computers and operating systems with little or no need for installation or configuration.

When you click on the link to run **Jinx**, you download a small file which your web browser should automatically recognize and cause the appropriate **Java** "*jar*" files to be downloaded through **Java Web Start**. Using this mechanism ensures that you will always be using the most current and up to date version of **Jinx** without having to keep up with patches, versions, or complicated downloads.

If this is your first time using **Jinx** please read the **Notes** section below. It contains many useful suggestions and tips. Also please take time to review the **Jinx** online documentation here.

Troubleshooting

Please see the **Notes** section below for further information on installation and debugging.

Contents

News

New Test Versions uploaded (10/30/09).

Distribution

Click here to run **Jinx** in a 2000 MB **Java Virtual Machine**.

Click here to run **Jinx** in a 1024 MB **Java Virtual Machine**.

Click here to run **Jinx** in a 512 MB **Java Virtual Machine**.

Documentation

Want to be notified by email of updates to **Jinx**? Sign up for the **jinx_dev** mailing list here. This is a low traffic mailing list devoted to announcements about **Jinx** and associated applications.

Please click here for **Jinx** documentation.

Test Version

Updated: **October 30, 2009**.

Some small fixes for **Macintosh** have been deployed.

The **Two Gigabyte Java Web Start**barrier has been crossed. **Jinx** is now available running in a **3 Gigabyte** virtual machine. To use it, you must have a fairly recent installation of **Java**(Version 1.6.0_12 or later), and, of course, a machine with a 64-bit address space (AMD x86_64,Sun SPARC 64,etc.) with a sufficient amount of memory. Note that the**Apple Macintosh** supports Java 1.6 but it is not enabled by default. Please see here for information on how to enable 64-bit**Java**. You must have an **Intel** based **Macintosh**,**PowerPC** (**PPC**) **Macintoshes** are **not**supported for **Java** 1.6.

COMPATIBILITY NOTE: The **Test** version contains a file format version update to **Version 1.8**. Files saved from the **Test** version will not be backward compatible to the**Production** version, which is **Version 1.7** and which will refuse to read said files.

To go directly to the links, click here.

Of particular note to **Rick Giuly** and probably no one else at this point:

- **Giuly Blobs** support has been changed to allow importation of multiple files. To use, open a volume under the **File** menu (the**File**?**Import**?**Giuly Blobs** submenu has been removed and reimplemented as discussed below).
- When the volume is loaded, under the **Segment** menu, select**Giuly Blobs**. This will open a **Giuly Blobs** workspace tab with similar function to the familiar **Manual Seg** tab but it will have an extra menu in the top menu bar, **Giuly Blobs**. Under that menu you will find the **Import Giuly Blobs File…** item, which will allow you to load **BlobsXML** files. You may load as many blobs files as you wish.

The user interface and capabilities of the *"Preview"*function has been significantly updated and modified.

- You'll notice two items at the top of the **"Jinx Visualizer"** panel:**"Scaling"** and **"Show Volume Slice"**. Clicking the **"Hide"** button toggles visibility of the controls.
- The **"Scaling"** sliders function allow you to change the scaling of the objects in the **X**, **Y**, or **Z** directions.
- You can now show cross sections of the volume in the*"Preview"* function. The **"Show Volume Slice"** panel allows you to select planes.
  You can also type a plane number directly into the text readout. When you press **Enter** or **Return** (depending on your keyboard), the plane will be selected.
  To turn on and off the slices, click the*"XY"**,**"XZ"**, and *"YZ"** check boxes. You can also control transparency and color of the planes by clicking the leftmost **"color"** boxes for each item.

UI changes in the **"Preview"** function

- The arrow keys now control rotation. Mouse dragging will move the object laterally in the display. Zooming is by the*"Page Up"**/**"Page Down"* keys. You can restore default zoom with the*"Home"* key.
- **F1**, **F2**, and **F3** work as before.
- There is known user interface bug that sometimes causes the*"Select Display Settings"* popup to be hidden by the*"Jinx"* main panel. I'm not sure whether this happens on all systems but if you run **"Preview"** and nothing seems to be happening, try pushing the main panel to be back of the window stacking order in whatever manner your UI allows or just drag it out of the way.
- ~~**Caveat:** In the **"Select Display Settings"** pane, don't choose**"Fullscreen"**. That doesn't work properly yet. Also, leave the renderer mode as **"LWJGL"."JOGL"** -~~is also not not set up properly.-The **"Select Display Settings"** pane has been replaced by a simple resolution selector. You may either select one of the preconfigured resolutions or enter your own. The visualizer window is currently not resizable.

Two new export data formats are supported in this test version:COLLADA and **Giuly "Blobs"**.
COLLADA is a graphics format standard developed to support interactive **3D**. If you are using a **3D**visualization application which supports **COLLADA**, I would appreciate feedback on this export format.

The **Giuly "Blobs"** format was added in support of ongoing research into segmentation algorithms by Rick Giuly and will not be of immediate use to most other **Jinx** users.

There are also some minor bug fixes included in this test release.Choose an appropriately sized **Java Virtual Machine** for your computer or workstation:
Click here to run **Jinx** in a 3072 MB (3 GB) **Java Virtual Machine**. (see above)

Click here to run **Jinx** in a 2000 MB **Java Virtual Machine**.

Click here to run **Jinx** in a 1024 MB **Java Virtual Machine**.

Click here to run **Jinx** in a 512 MB **Java Virtual Machine**.

Notes

The first time you run **Jinx** on any machine, you will be presented with certificate requests from **ncmir.ucsd.edu**,**download.java.net**, and **lwjgl.org**. You must accept all three of these certificates in order to run **Jinx**. If you accept them permanently, this will expedite running **Jinx** in the future on that machine.

You will notice that there are no longer separate versions of the link for **NIF** and **SAO**. The identification of the ontology is now embedded in the **.jnx** file. You will be prompted to select an ontology when you create the first object or you can set this in the "**Preferences**" dialog under the "**Edit**" menu. Note that not all **Preferences**are currently enabled. Those not enabled are "*greyed out*".

There is a new layout in the *Manual Contouring* window, with all controls across the top of the space instead of down the right side. The controls may be "*to rn off*" and placed anywhere on the screen.

There is also uses an improved algorithm for creating triangles in the "*Export*" functions. This may improve export to**VRML** and other formats.

Optimizations have been implemented for surface creation to speed up the process when making multiple passes as you're "tweaking" a surfacing.

A few important *caveats* regarding **Marching Cubes** surfacing:

- A object must be traced on all planes from its beginning to end. If you skip any planes, gaps will appear in the surfacing. You ***may*** skip planes if you skip them consistently -- *e.g.*, trace every other plane, every third plane, every 25th plane, etc. You ***may not*** skip planes randomly unless you intend to have gaps in the object -- *e.g.*, trace planes *1*, *2*, *3*, skip *4*, then *5*, *6*, and *7*.
- Only **Closed** traces are currently supported. An error message will be produced and the surfacing will abort if you try to use **Marching Cubes** surfacing with **Open**traces.
- There is a known bug which may produce small holes in the surface under certain circumstances. This will be fixed shortly.
- Surfaces may exhibit a marked "wedding cake" or "terracing" effect. This is an artifact of the**Marching Cubes** algorithm.
- There will most likely be signficantly *more* polygons produced by **Marching Cubes** than by**Nuages**.
- Traces should be reasonably well aligned from plane to plane. If there is not a large amount of overlap between traces, an excessive number of polygons will be generated, possibly causing memory exhaustion and a **Java** error.
  About JVM Sizes. A larger Java Virtual Machine (**JVM**) is generally the better choice if you have the available computer memory. If you receive "**OutOfMemoryError**" messages at the startup of the program, try a smaller **JVM**.

If you have problems with the smallest version of the **JVM** or if they occur after the program has started and it is running, this is indicative of a software error of some sort. Please see below to contact the software author/maintainer.

Java Web Start. You will need **Java Web Start** and *at least* **Java** 1.5 (aka **Java** 2) in order to run this application. **Java Web Start** is part of the all the more recent **Java** distributions and should not need to be separately installed.

Java *1.6* is highly recommended because of many significant performance improvements.
If you are not sure whether you have **Java Web Start**installed or are experiencing problems running it, please click here. This page will automatically test whether you have **Java Web Start**properly installed.

If it is not installed, please contact your system administrator and request that this package be installed, or, if you're managing your own system, check here to find a **Java** installation package. Unless you plan on doing your own **Java** development, you should only need the **Java *Runtime Environment*** (**JRE**). Installation instructions are provided for **Solaris**, **Windows**, and **Linux**. **Apple Macintosh** users should click here for information on installing **Java**.

Note: if **Jinx** either "invisibly" fails to start (that is, if, when you click on the link, nothing happens), or you are prompted by the browser to **Save** the**JNLP** file, this may mean that you need to set a proper application "*association*" for **JNLP** files. Some browsers come properly preconfigured, so you should never have to do this, but given the multifarious configurations and installations of browsers, this may not always be the case. Usually there is a**Preferences** dialog which allows you to set up these things. Please click here for more information.

If you have an "*association*" set but things are still not working, verify that the association is actually pointing at a valid and current version of **Java Web Start**(javaws). If it is pointing to a "private" installation of **Java**, then this may be the source of your problems.

If difficulties persist, please feel free to contact the maintainer, who will be happy to assist you.

Jinx.jnlp* files.** You may notice an accumulation of small files with the filename ***Jinx.jnlp or ***Jinx-1.jnlp***, ***Jinx-2.jnlp***, … appearing in your **Desktop** folder, your home directory, or in some temporary directory/folder. This file contains the directives used by **Java Web Start** to download the components of **Jinx** to run on your machine. At the present time it is not possible to automatically delete these files in a reliable manner. We are hoping to find a solution to this minor annoyance at some point in the future. You may safely delete these files at will, since they are used *only* at startup.

Jinx event log files. Jinx event log files also tend to accumulate. If the program runs successfully, you may safely delete these files (See below for What to do in case of problems). **Jinx** now looks for these old files at startup and will prompt you to delete them when more than 5 of them accumulate.**What to do in case of problems.** This is still *Beta* software and may have bugs or unimplemented features. If you have problems running the program, it crashes, or it produces what you believe to be erroneous results, it is ***vitally important*** that these problems be reported.

As an aid to debugging, **Jinx** produces a log file recording a considerable amount of user and internal interaction which will be written in your "*default*" directory or folder. The location of this "*default*" directory or folder varies by operating system.

The log file names will have the date and time embedded in them and will be similar in form to the following: **Jinx.2007.04.18.113621.305.event**
A unique identifier will be generated for each session. You may be requested by the maintainer to start or run the **Java Console**. Instructions on how to turn this feature on are here.

Contact

If a problem arises, this file should be emailed here along with any pertinent information you might wish to add to aid in debugging the problem.