SpaceClaim Rhino Plug-In Notes

These technical notes cover the SpaceClaim Plug-In for Rhino.

About the Plug-in

The Plug-in Exports all (or a selection) from Rhino to SpaceClaim, and also Imports the current window contents of SpaceClaim back into Rhino starting with any **stored .3dm** document.

Requirements

1. SpaceClaim Professional or LTX 2008 Service Pack 2 or later(32-bit only)
2. Rhino 4.0 or later

Installation

- In Rhino, go to Tools -> Options -> Plug-Ins and select the **Install** button
- In the Load Plug-In dialog, Browse to the SpaceClaim installation folder (Current default is C:\Program Files\SpaceClaim 2008)
- Select "**RhinoSpaceClaimPlugIn.4.0.dll**" from the SpaceClaim installation folder
- Click the **Open** button to get it to populate into the Plug-in list.
- **NOTE: If you receive an error it is likely because there is an extra .dll in the SpaceClaim installation folder.**
  - o Close SpaceClaim and Rhino applications.
  - o Browse to the SpaceClaim installation folder and remove: "**Rhino_DotNet.DLL**" if it exists.
- Try installing the Plug-In again.

Loading Plug-in

- Find the Rhino SpaceClaim Plug-In item in the list of plug-ins **"Rhino SpaceClaim PlugIn"**
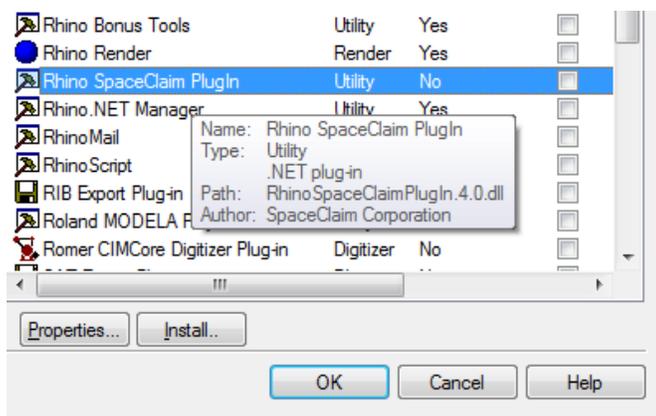
- Right Mouse Button on the Plug-In and Select **Load Plug-In**
- **OK** to finish

This should load a button in Rhino toolbar with SpaceClaim logo (Look in the Upper Right Corner). Anytime the Spaceclaim button is pressed in the future it will load the plug-in if it is not loaded already.

For more instructions on Plug-Ins, please refer to "Help->Plug-Ins" menu in Rhino.
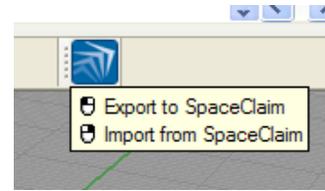
Using the Plug-In

Starting with a stored (opened or saved) Rhino document, if you have nothing in the Rhino screen selected and you left-click, it will launch SpaceClaim and Export the whole window to SpaceClaim. If you have something selected (a single surface, or set of surfaces) and left-click, it will launch SpaceClaim and only export what is selected to SpaceClaim. Once in SpaceClaim you can work with the surface in many ways such as editing, offsetting to create a precise solid, and creating mechanical elements such as ribs, bosses, holes, and reveals.
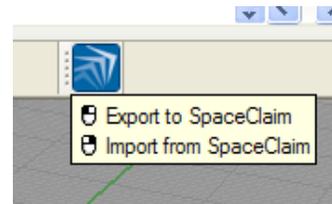
If you want to send this back to Rhino, you can right-click in Rhino and the model will re-import into the Rhino window in the exact place as the original. There will be 2 surfaces or solids (old and new) in the same place allowing for comparison and manual replacement.

Additional Notes

Rhino has a file locking capability, so you must close SpaceClaim first, or you can set an option in Rhino (not recommended) - this has something to do with file locking and file protection (In Rhino, Tools->Options...->Files->File Locking – uncheck this checkbox).

File Locking

Enable

Rhino lock files *<filename>.3dm.rhl* are created to let other instances of Rhino know that a file is in use. Lock files are created when a .3dm file is opened or when an unnamed file is saved as a .3dm file.

Notes:

- Lock files **do not** prevent the file from being opened; they are only used to get information about who is using the file.
  This information can display in a warning message to a second user who tries to access the .3dm file with Rhino.
- If a lock file exists, Rhino lets other users open the related .3dm file only in read-only mode.
- The lock file is automatically deleted when Rhino successfully closes the .3dm file.
  If the Rhino file does not close successfully, abandoned .rhl files may prevent re-opening the associated Rhino file.
- Abandoned .rhl files can be deleted.

Display read-only warning

Displays in a warning message to a second user who tries to access a locked .3dm file with Rhino.