

## Plugin **Museum/Gallery Reference** - for SketchUp 7 Free/Pro

**Make your 3D models more valuable by linking them –  
Camera views, Layers visibility, Animation states, and Scene selections...  
from and to an external HTML reference document.**

HTML enables rich text annotation and incorporates images and videos,  
making HTML the best format today for documenting and creating guides and knowledge bases.  
Linking 3D models to rich HTML references will make the 3D models much more valuable  
once they can be peeled, dissected, investigated, explored, animated, etc ..  
and should make worthwhile the time and design intelligence invested by model builders.

This plugin tries to be intuitive and simple to use, to get you results quickly.

*This is a beta version – more features coming soon .....*

### Installation

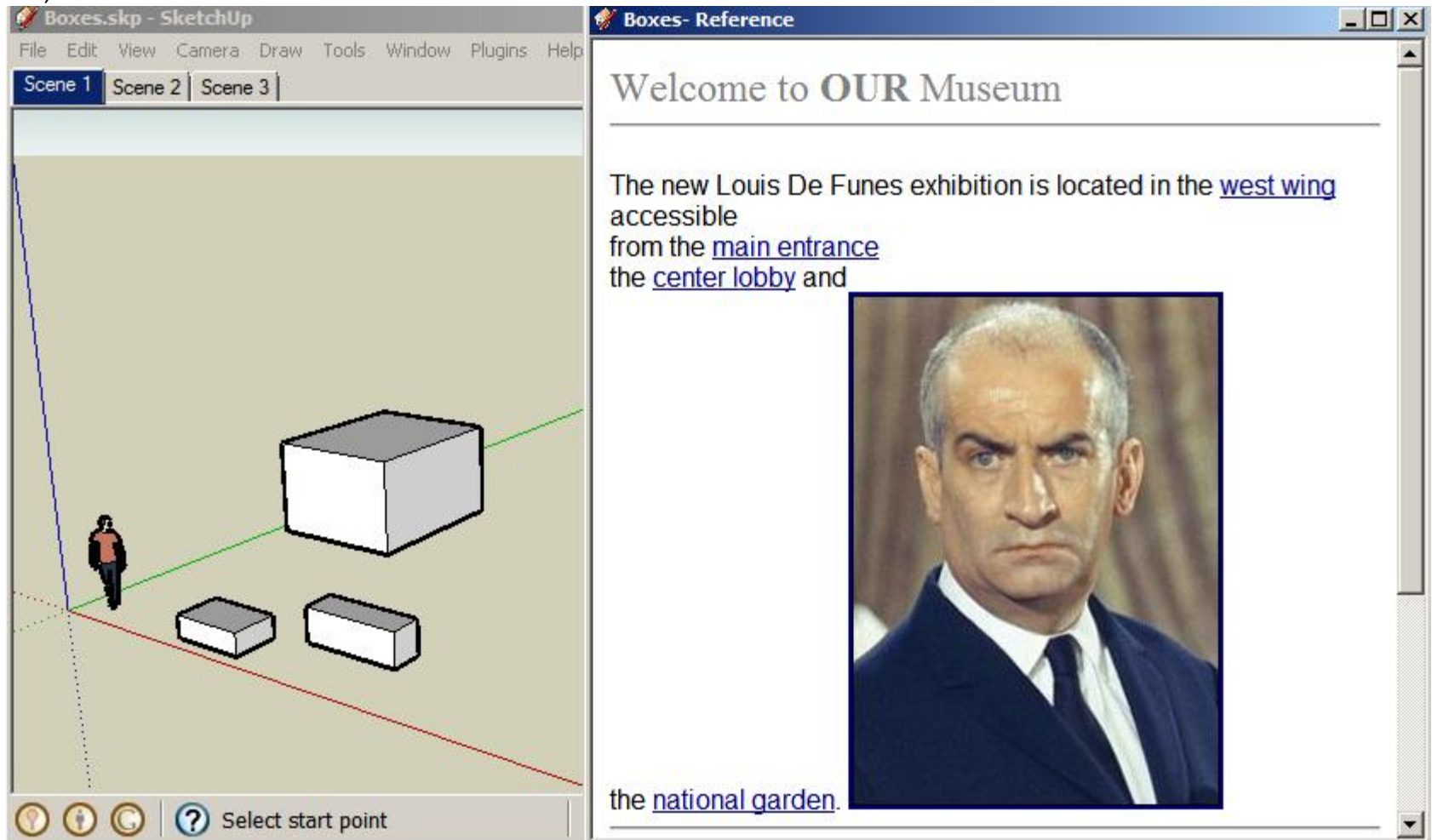
- 1) Unzip the downloaded archive file into a temporary folder.
- 2) copy file **“gallery\_reference.rbs”** into your **“Plugins”** folder under your SketchUp install folder
- 3) Default install folder location is - “C:\Program Files\Google\Google SketchUp 7\Plugins “
- 4) **Restart** SketchUp and note a new menu item under "plugins" named **“Museum/Gallery Reference”**

When opening a SketchUp model that has an associated reference HTML document defined, a window containing that document will **automatically** open , along side SketchUp.

Standard **HTML links** in the document can reference the SketchUp model and control it.

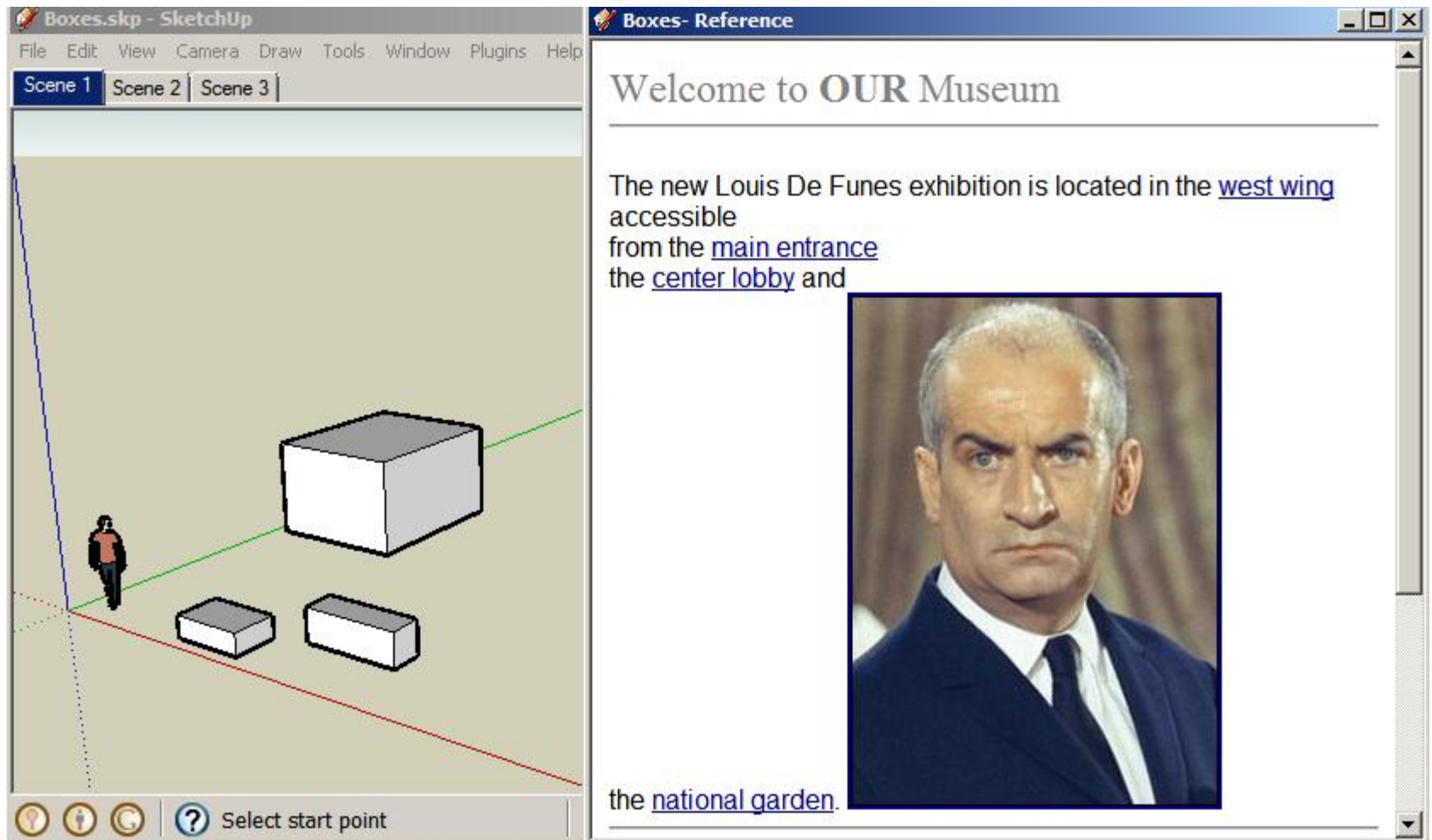
Currently available for this beta version are link referencing of:

- 1) Camera View (+ multiple views chained)
- 2) Layers Visibility (+ XRay)
- 3) Entities Animation
- 4) Scene Selection



The HTML document can be authored by any HTML editing software of your choice  
Standard A ([ANCHOR](#)) links can be used by setting their **HREF** values according to following syntax

- 1) Camera Views - [<a href="skp:retrieve\\_cam@my\\_named\\_cam\\_1"](#)
- 2) Layers Visibility - [<a href="skp:retrieve\\_layers@my\\_named\\_hide\\_walls"](#)
- 3) Animation (proper animation plugin) - [<a href="skp:select\\_animation@3"](#)
- 4) Scenes Selection - [<a href="skp:select\\_scene@Scene 2"](#)

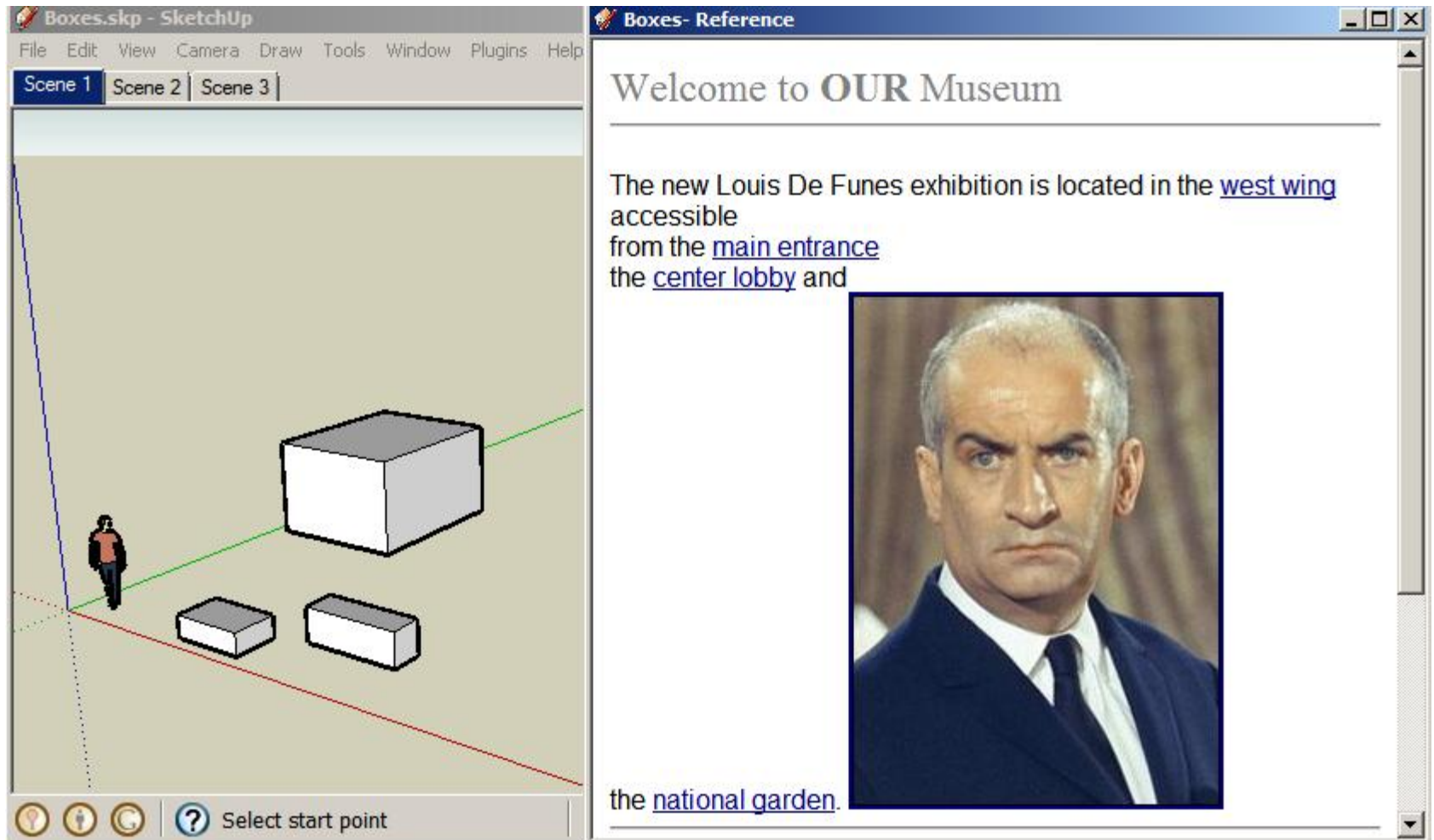


You may **chain multiple camera names** to get a **multi leg fly out effect**,  
by comma separating the camera names

example:

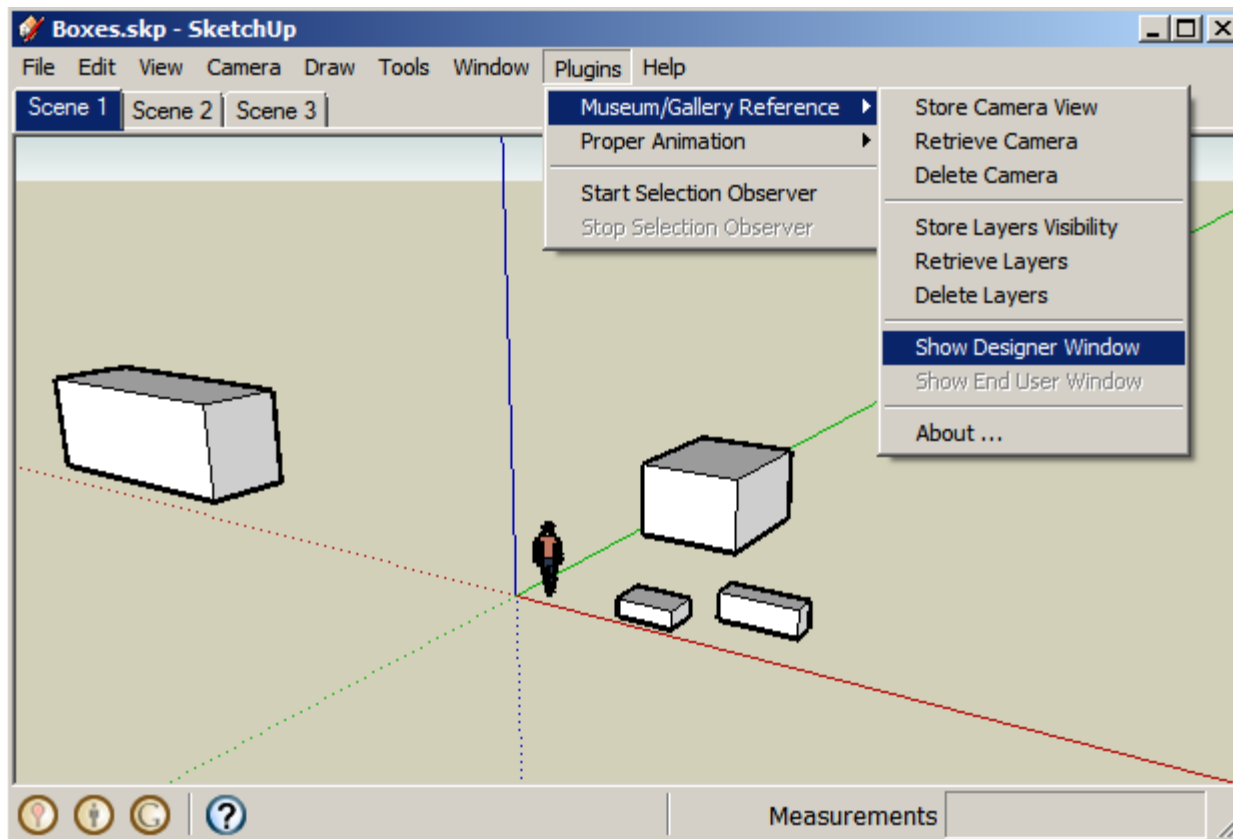
- 1) `<a href="skp:retrieve_cam@street,main_entrance,lobby,westwing"> click_route </a>`

(right now only “*retrieve\_cam*” supports this multiple parameter option)



To create names that store current status for camera views, layers etc –

- 1) Menu → Plugins → Museum/Gallery Reference → Store ...  
Type into the **input box** the desired name
- 2) Alternatively use the “**Designer Window**”  
Menu → Plugins → Museum/Gallery Reference → Show Designer Window
- 3) Make adjustments and save into new names



To create 'names' that store the current status, for later retrieval

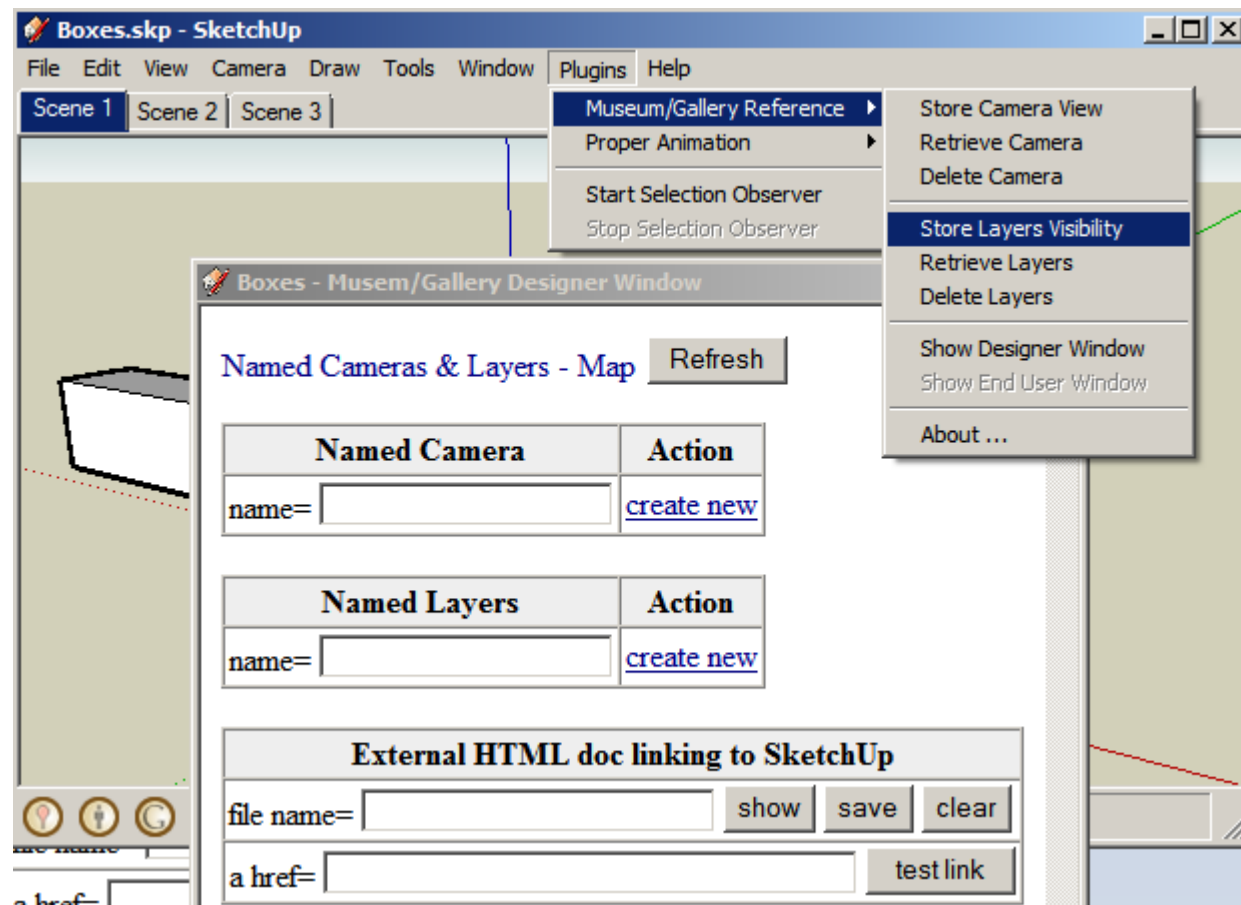
- 1) Use the “**Designer Window**” to review, adjust and delete  
Menu → Plugins → Museum/Gallery Reference → **Show Designer Window**  
Camera views, Layers visibility, referring HTML document file name
- 2) For Animation creation - use the plugin “Proper Animation” version 1.06 +
- 3) For Scenes creation – use standard SketchUp functionality

The screenshot shows a web-based interface titled "Boxes - Museum/Gallery Designer Window". It contains three main sections:

- Named Cameras & Layers - Map**: Includes a "Refresh" button.
- Named Camera**: A table with two columns: "Named Camera" and "Action". The "Named Camera" column has a text input field labeled "name=" and a "create new" link in the "Action" column.
- Named Layers**: A table with two columns: "Named Layers" and "Action". The "Named Layers" column has a text input field labeled "name=" and a "create new" link in the "Action" column.
- External HTML doc linking to SketchUp**: Contains two rows of input fields and buttons. The first row has a "file name=" input field and "show", "save", and "clear" buttons. The second row has an "a href=" input field and a "test link" button.

You may use either “Menu” input boxes or the “Designer Window” input boxes

- 1) Both save your settings and associated ‘names’ into the same place – SketchUp Model Attribute Dictionaries in the model SKP file itself



You should **test** links you design your model to expose to external HTML documents

- 1) Type into the bottommost input box the “link” text and click the “test link” button – review reaction in SketchUp  
*(foreign languages might not be supported, stick to english names)*
- 2) Create an HTML document and “link” as needed to previously tested links – start slowly with the simplest single link  
*(stick to a single html file - using frames, iframes, remote web sites is possible but out of the scope of this tutorial – and general HTML authoring issues will not be supported by this author)*
- 3) Your new HTML document **must** be opened from within SketchUp for links to work – *Continued on next page ...*

**Boxes - Museum/Gallery Designer Window**

Named Cameras & Layers - Map

Named Camera	Action	
<a href="#">center</a>	<a href="#">update</a>	<a href="#">delete</a>
<a href="#">garden</a>	<a href="#">update</a>	<a href="#">delete</a>
<a href="#">main</a>	<a href="#">update</a>	<a href="#">delete</a>
<a href="#">west</a>	<a href="#">update</a>	<a href="#">delete</a>
name= <input type="text"/>	<a href="#">create new</a>	

Named Layers	Action	
<a href="#">all</a>	<a href="#">update</a>	<a href="#">delete</a>
<a href="#">nobig</a>	<a href="#">update</a>	<a href="#">delete</a>
name= <input type="text"/>	<a href="#">create new</a>	

**External HTML doc linking to SketchUp**

file name=

a href=



Your new HTML document **must** be opened from within SketchUp for links to work

- 1) **Copy** your HTML file into the **same folder** where your model SKP file is located  
(foreign languages might not be supported, stick to english names)
- 2) **Type** the NAME of your HTML file in the input box “file name=”  
(full name with extension, without folder portions)
- 3) Click the “**show**” button, to display and test your reference file

The screenshot shows a software window titled "Boxes - Museum/Gallery Designer Window". It contains three main sections:

- Named Cameras & Layers - Map**: Includes a "Refresh" button and a table with camera names and actions.
- Named Layers**: Includes a table with layer names and actions.
- External HTML doc linking to SketchUp**: Includes input fields for "file name=" (containing "Boxes\_ref.htm") and "a href=" (containing "skp:select\_animation@2"), along with "show", "save", "clear", and "test link" buttons.

Named Camera	Action
<a href="#">center</a>	<a href="#">update</a> <a href="#">delete</a>
<a href="#">garden</a>	<a href="#">update</a> <a href="#">delete</a>
<a href="#">main</a>	<a href="#">update</a> <a href="#">delete</a>
<a href="#">west</a>	<a href="#">update</a> <a href="#">delete</a>
name= <input type="text"/>	<a href="#">create new</a>

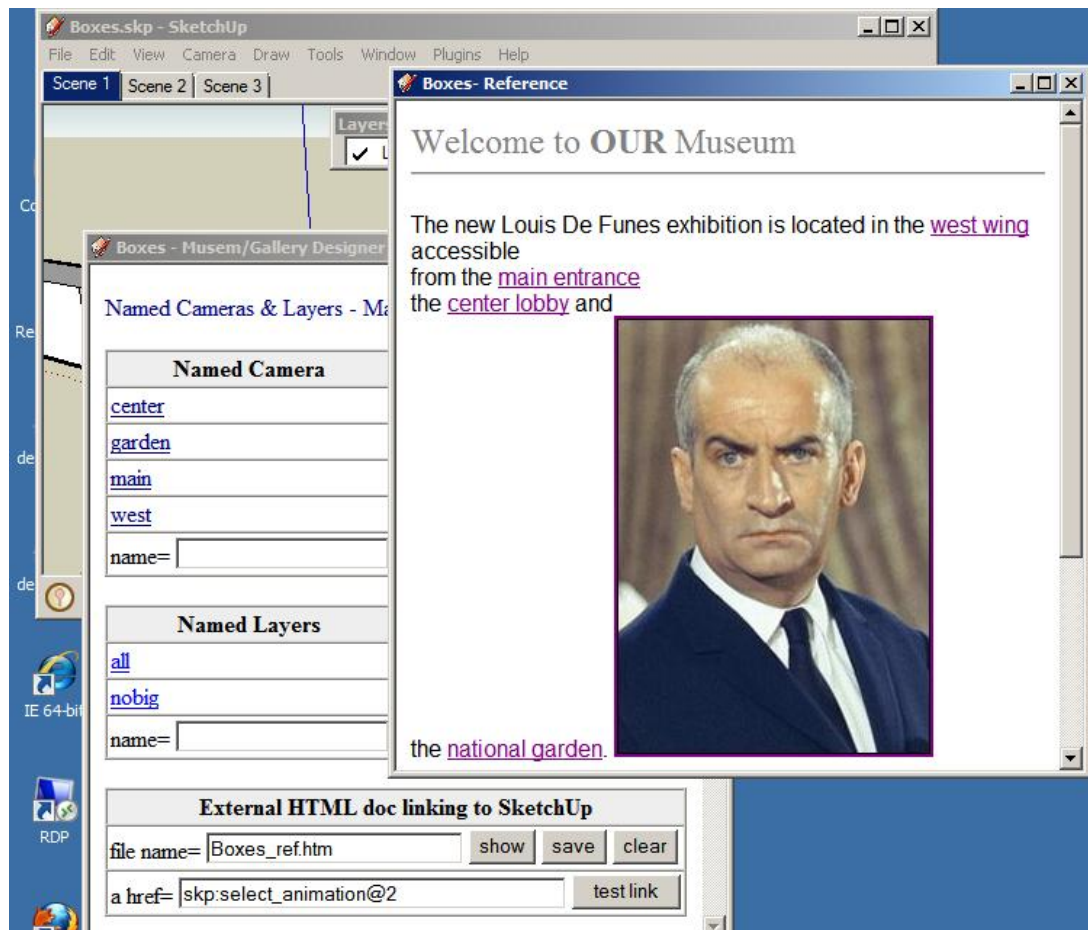
Named Layers	Action
<a href="#">all</a>	<a href="#">update</a> <a href="#">delete</a>
<a href="#">nobig</a>	<a href="#">update</a> <a href="#">delete</a>
name= <input type="text"/>	<a href="#">create new</a>

External HTML doc linking to SketchUp	
file name= <input type="text" value="Boxes_ref.htm"/>	<input type="button" value="show"/> <input type="button" value="save"/> <input type="button" value="clear"/>
a href= <input type="text" value="skp:select_animation@2"/>	<input type="button" value="test link"/>

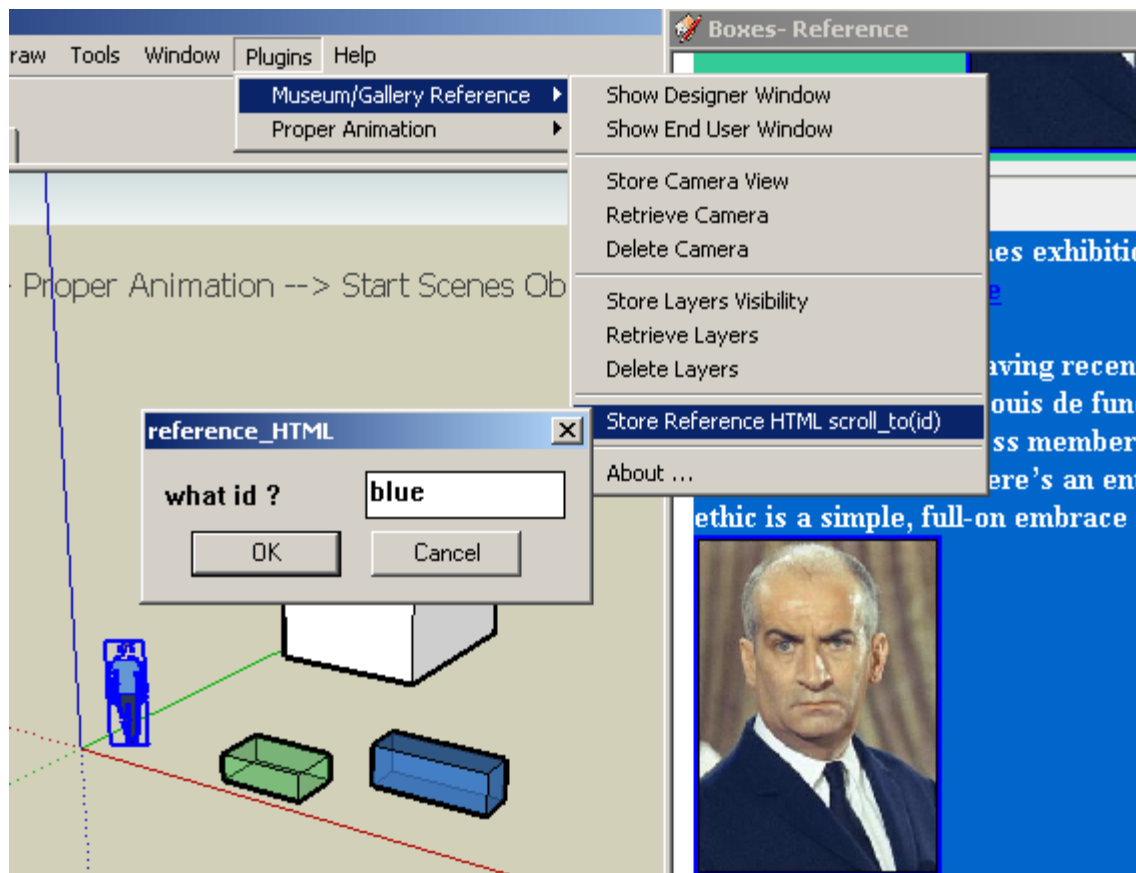
Your new HTML document **must** be opened from within SketchUp for links to work

- 1) Click the “**show**” button, to display and test your reference file  
*(if a new window does not open up – first: verify the exact full file name and location, second: open the “SketchUp Ruby Console”– Menu → Window → Ruby Console” – retry links and note error messages)*
- 2) Clicking on the “save” button will store the referencing file name in the SketchUp model itself, for later reference. Every time this model is opened up the plugin looks to see if a reference HTML file name is defined for this model and if it is, the plugin tries to open and display it automatically without any additional user interaction.



For good user experience its advised to design two way interaction, also back **from SketchUp to HTML** reference window

- 1) **Select** a SketchUp object (highlighted with blue box) that will automatically trigger scrolling of reference window  
Menu → Plugins → Museum/Gallery Reference → **Store Reference HTML scroll\_to(id)**  
type the **id** of the HTML element in your reference file, to scroll HTML window to, on this 3D object selection
- 2) From now on, selection of this SketchUp object will trigger **scrolling** of the reference window to the relevant location  
*the interaction should be designed to enable free exploration of both model and HTML, not tightly planned route*
- 3) To **clear** the automatic trigger on an object's selection, repeat with a 'blank' id



## Advanced Users

This plugin is based on the new WebDialog functionality introduced in SketchUp 7.

In addition to the four linkable reference options described before, the general “call\_ruby” function is also exposed enabling an unlimited referencing options to any other developers plugins and functionalities.

```
function callRuby(ruby_name, msg) {  
  try {fake_url = 'skp:' + ruby_name + '@' + msg;  
      window.location.href = fake_url; }  
      catch(err) { alert(err.description); } }
```

Because of security implications this might not stay in future versions of this plugin.

More features and linking options are planned for this plugin ....

Come back for newer versions

In the official release all the attribute dictionary names and complete module,class,methods will be documented.

- 1) For more relevant information follow the Sketchucation forum  
<http://forums.sketchucation.com/viewtopic.php?f=323&t=24943>