LAYER MANAGER 2.1 for SketchUp v5 and higher (Free and Pro)
D. Bur, 18.07.2009

This is an update of the previous version for SU v6 with changes and enhancements.
Thanks to TIG for his "layer.delete" initial method.
Thanks to John Clements for testing and suggestions.

The Layer Manager is a set of tools to quickly display, show, hide, isolate and manage your layers. It has features to store, restore, save, load, update layers visibility states, wether within the SKP or in external files for later use.

What is a "layers state" ? This is a visibility status of all the layers of a drawing at a time. When working on models with lots of layers, it can be very long to select which layer to display and which not. Layers states can help you doing that very quickly.

What's new:

- Layer tools set enhanced, several commands added
- Tools are more user-friendly and interactive
- Bugs fixes
- New icons, custom cursor
- Layers of groups support
- More information in the status bar.

Installation:
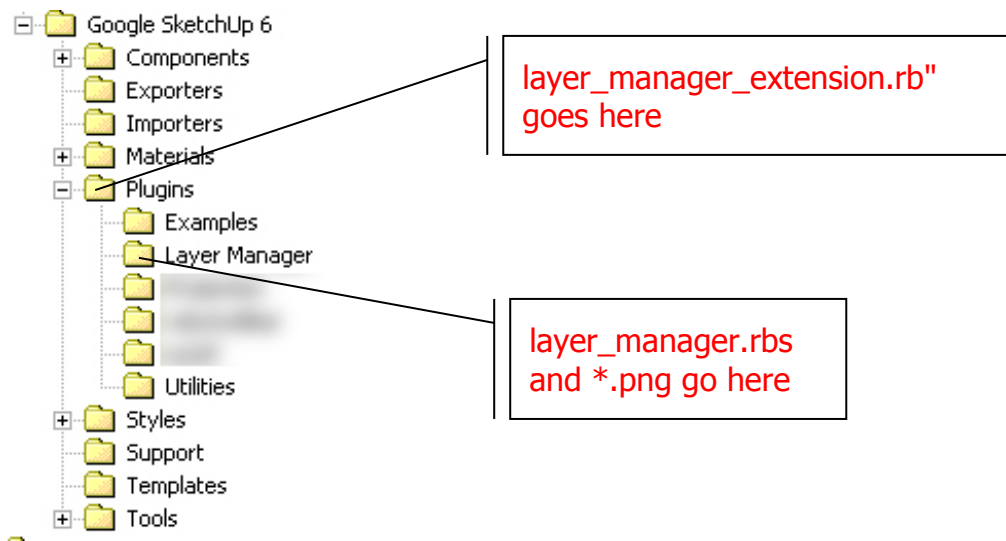
Please delete previous version if you have it installed:
- Delete "layer_manager_extension.rb" in your "Plugins" folder
- Delete "Layer Manager" folder(under "Plugins") and all its content.

Unpack the archive in the SketchUp "Plugins" folder.

You should have:
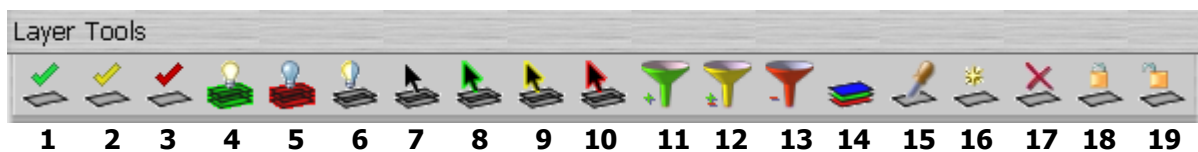"layer_manager_extension.rb" in your Plugins folder
A sub-folder "Layer Manager" containing layer_manager.rbs and *.png files.

layer_manager_extension.rb"
goes here

layer_manager.rbs
and *.png go here

Usage:

There is no menu in the pop-menus, only two toolbars available in the View menu:

- Select View > Toolbars > Layer Tools

- Select View > Toolbars > Layer Manager

Tooltips on the icons tell you what commands do, status bar will do as well, but below is a short explanation of what they are for.

Layer tools toolbar:

1. Set the layer of clicked object active

Click the icon and move mouse over objects. The tooltip shows which layer the object is on, and adds [current] when applicable. Click on the object when you are ready to active its layer. You can click another object right away to select another layer, or to exit the tool: hit the Escape key, or select another tool, or hit the Enter key.

2. Set the layer of clicked object active and isolated

Same tool as above except that all other layers will be set invisible.

Click the icon and move mouse over objects. The tooltip shows which layer the object is on, and adds [current] when applicable. Click on the object when you are ready to active its layer. To exit the tool: hit the Escape key, or select another tool, or hit the Enter key.

3. Set the layer of clicked object inactive

Click the icon and move mouse over objects. The tooltip shows which layer the object is on, and adds [current] when applicable. Click on the object when you are ready to active its layer. You can click another object right away to hide another layer, or to exit the tool: hit the Escape key, or select another tool, or hit the Enter key.

Clicking on an object of the current active layer has no effect.

4. Set all layers visible

Click the icon, all layers of the model will be visible. This command can be used when another tool is active.

5. Set all layers invisible

Click the icon, all layers of the model will be invisible, except the current layer. This command can be used when another tool is active.

6. Toggle all layers visibility

Click the icon, all visible layers of the model will be invisible (except the current layer) and all invisible layers will be visible.

This command can be used when another tool is active.

7. Select content of layer

Click the icon and move mouse over objects. The tooltip shows which layer the object is on, and adds [current] when applicable. Click on the object when you are ready to select all entities of this layer.

You can click another object right away to select the content of another layer.

Click on a selected object to deselect all the content of its layer.

To exit the tool: hit the Escape key, or select another tool, or hit the Enter key.

8. Move selection to current of layer

You must select objects prior to use this command.

Click the icon and selection will be moved directly to the current active layer.

If there is at least a group in the selection, you'll be asked to answer this question:

> **SketchUp**
> ⚠ Selection contains groups.
> Move all their content to current layer Calque1 ?
> [Oui]   [Non]

Hitting the "Yes" button will move the group(s) itself AND its content to the current layer, hitting "No" will move only the group itself and leave the content as is.

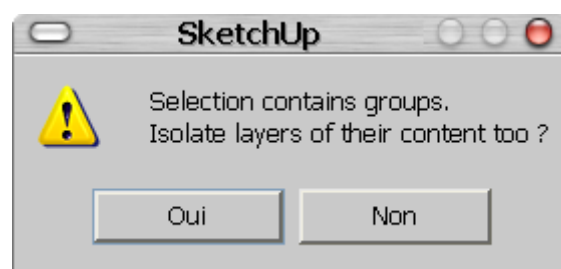Current active layer is ignored by this command.

9. Isolate layers of selection:

You must select objects prior to use this command.

Click the icon and all layers of the selected objects will stay visible, while other layers will be set invisible.

If there is at least a group in the selection, you'll be asked to answer this question:

> **SketchUp**
> ⚠ Selection contains groups.
> Isolate layers of their content too ?
> [Oui]   [Non]

Hitting the "Yes" button will isolate all the layers of the group content AND the layer of the group itself, hitting "No" will just isolate the layer of the group.

Current active layer is ignored by this command.

10. Set layers of selection invisible:

You must select objects prior to use this command.
Click the icon and all layers of the selected objects will be set invisible.
If there is at least a group in the selection, you'll be asked to answer this question:

Hitting the "Yes" button will hide all the layers of the group content AND the layer of the group itself, hitting "No" will just hide the layer of the group.

The three following commands use "filter strings" to either display, hide, or isolate layers.
A filter string is a set of characters containing wildcards.

Two wildcards are available: * and ?
- * replaces any characters string, no matter its length
- ? replaces any single character.

Examples:

a*	will match all layers whose names start with the letter "a"
abc*	will match all layers whose names start with the letters "abc"
***a**	will match all layers whose names start with anything but ends with the letter "a"
***abc**	will match all layers whose names start with anything but ends with the letters "abc"
Furniture	will match all layers whose names contain "Furniture"
?walls	will match all layers whose names start with one character and ends with "walls"
??slab	will match all layers whose names start with two characters and ends with "slab"
???kitchen?	will match all layers whose names start with three characters followed by the string "kitchen" and ends with one character.
garden??wall	will match all layers whose names start with the string "garden" followed by two characters and ends with the string "wall".
***roof??**	will match all layers whose names start with any string followed by the string "roof" and ends with two characters
????w*	will match all layers whose names start with four characters followed by any string starting with the letter "w".
?*	doesn't make sense, will be ignored
***?**	doesn't make sense, will be ignored
****?**	doesn't make sense, will be ignored
??*???	doesn't make sense, will be ignored
Layer12	no wildcards, will be ignored

11. Add visible layers by filter:

Click on the icon, the following dialog box will be displayed:

Allowed wildcards:	* replaces any character or digit string
Existing filters:	
Case-sensitive:	Yes
Filter string to show layers:	
OK	Annuler

- Allowed wildcards line is just for reference.
- Existing filters lists filter strings that you used previously.
- Case-sensitive: when "Yes", makes the filter string case-sensitive.
- Filter string to show layers: type your filter string, see above.

All layers whose names are matching the filter string will be set visible.
Current active layer is ignored by this command.

12. Isolate layers by filter:

Click on the icon, the following dialog box will be displayed:

Allowed wildcards:	* replaces any character or digit string
Existing filters:	
Case-sensitive:	Yes
Filter string to isolate layers:	
OK	Annuler

- Allowed wildcards line is just for reference.
- Existing filters lists filter strings that you used previously.
- Case-sensitive: when "Yes", makes the filter string case-sensitive.
- Filter string to isolate layers: type your filter string, see above.

All layers whose names are matching the filter string will be set visible, all other layers will be set invisible.
Current active layer is ignored by this command

13. Set layers invisible by filter:

Click on the icon, the following dialog box will be displayed:

- Allowed wildcards line is just for reference.
- Existing filters lists filter strings that you used previously.
- Case-sensitive: when "Yes", makes the filter string case-sensitive.
- Filter string to hide layers: type your filter string, see above.

All layers whose names are matching the filter string will be set invisible.
Current active layer is ignored by this command.
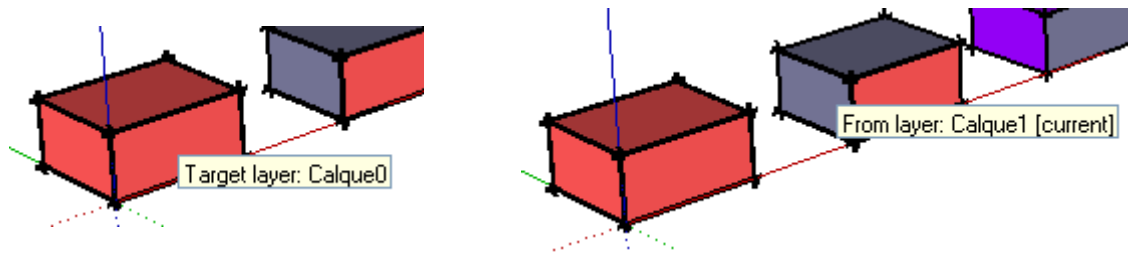

14. Toggle "by color" display:

Click on the icon, the face display is switched to "color by layer", click on the icon again to switch back to normal display.

15. Match layer property:

Click on the icon and move mouse over objects. The tooltip shows which layer is the target layer, and adds [current] when applicable. Click on the object to set the target layer. Move the mouse over other objects, the tooltip the layer objects are on. Click on the object to move it from its layer to the target layer.
 active its layer.
You can click other objects right away to move them on the target layer. Hit the Enter key to choose another target layer, hit the Escape key to abort or select another tool.
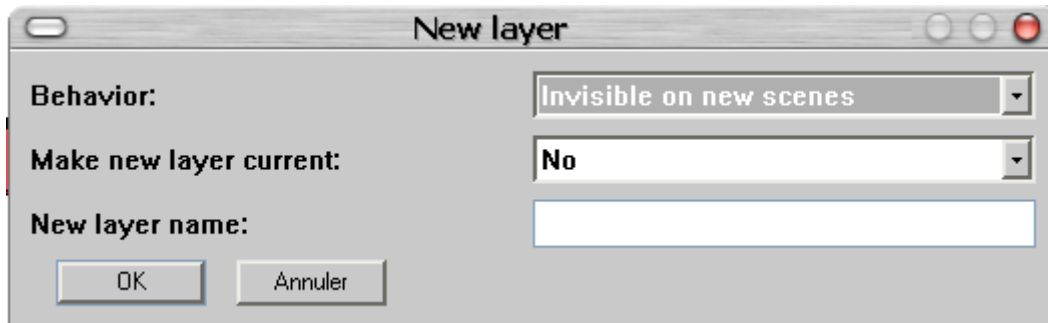
Once the target layer set, if you click on a group you'll be asked either to move only the group to the target layer or to move the group itself AND all its content:

16. Create new layer:
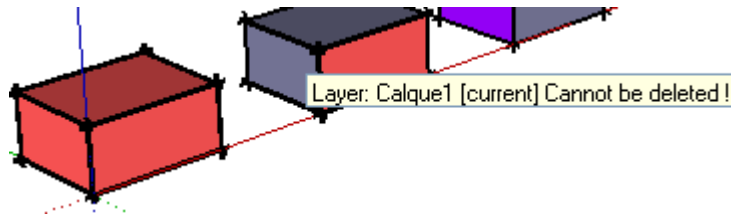Click on the icon, the following dialog box is displayed:

- Select a behavior for the new layer
- Choose to set it active and current, or not
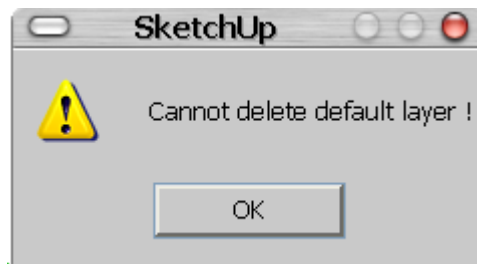- Enter name of layer (unique name automatically supported)

17. Delete layer:
Click on the icon, and move mouse over objects. The tooltip shows which layer is the object on, and adds [current] when applicable. Current layer cannot be deleted.
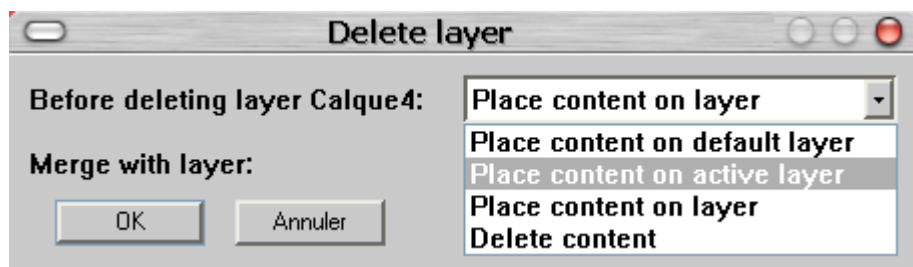
If you click on an object which is on the default layer, you'll get the following message:

Once the object is clicked, select options:

If you select "Place content on layer", select destination layer in the list "Merge with layer".

17. Lock layer:

Click on the icon, and move move over objects. The tooltip shows which layer is the object on, and adds [current] when applicable, and [locked] if the layer is already locked. Clicking on a locked layer has no effect.
All entities of the layer are gathered in a locked group.

17. Unlock layer:

Click on the icon, and move move over objects. The tooltip shows which layer is the object on, and adds [current] when applicable, and [locked] if the layer is already locked. Clicking on an unlocked layer has no effect.
The locked group is unlocked and deleted.

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