



## SkinStudio Technology Whitepaper - Layers

## **What is a layer?**

A layer is basically another graphic which is drawn over another.

If you have used any modern graphics package you are probably used to the concept of layers.

SkinStudio 6.1 introduces the concept of using layers directly in your WindowBlinds skin.

## **Why not just use layers in my graphics package?**

In many cases you should indeed keep on using layers in your graphics package. These are ideal where the graphics you are creating will always be a fixed size such as a titlebar button or glyph.

## **What can layers in a WindowBlinds skin do that I cannot do already?**

When you save an image for use in a WindowBlinds skin it will only contain one layer. You can then set margins and stretching modes in SkinStudio and that's it. This works well for basic graphics, but it has limitations when it comes to doing more advanced work.

Usually you end up having to compromise somewhere, for example if the user makes the taskbar taller then you either end up with stretching on your carefully designed texture, or live with a misalignment of the texture at the very bottom margin, or simply do without the subtle lighting effect you had planned to use to suggest the bar is 3D.

However if you use layers in your WindowBlinds skin directly, you can produce something which looks stunning regardless of how large the control is.

In the above example you would just set the texture to be the base layer, and then create a second layer above it which is used for the lighting effects. You simply set the second layer to stretch vertically and configure the margins as required.

## **Is there a limit to the number of layers I can use?**

There is no hard limit to the number of layers you can use, but we suggest you keep it to a minimum for performance and memory usage reasons. It would be very unusual to need more than 4 layers in any one part.

## **Can I use modes other than straight alpha blending?**

No. Currently layers are limited to straight alpha blending. This may or may not change in the future depending on user demand.

## Can I still use glyphs?

Yes. In fact each layer can have a glyph.

## What is the difference between this and a glyph?

A glyph image can be thought of as similar to a layer but with some limitations. Firstly, you could only have one glyph layer, secondly the glyph could only be drawn as a fixed size. It does not support stretching, tiling or margins.

## Can I mix magic pink transparency with per pixel alpha in a layer?

No. Layers should keep to the same type of transparency as their base layer. While mixing them may work for now on Windows Vista, there is no guarantee that this will continue to be the case.

## What sort of performance impact do layers have?

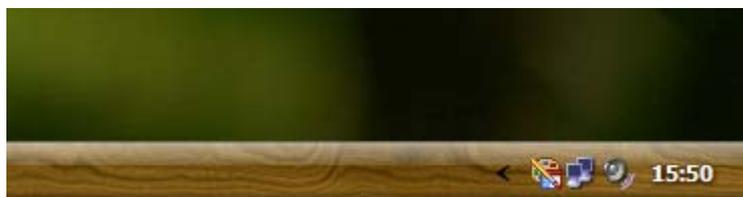
Naturally the more work that has to be done when drawing a theme, the slower the theme will be. In testing we have not found this to be a problem.

## What will users of my skins need?

Users will need WindowBlinds 6.02/6.03/6.1 or later installed.

## Examples of layers in use:

Here are some examples of layers in use under Windows XP and Vista. The taskbar consists of two layers, one for the base texture and one for a shine layer. All these graphics are included with SkinStudio 6.1 in the samples folder.



Single line wooden taskbar



Multi line wooden taskbar



Very tall wooden taskbar



Small pink clay taskbar



Multi line pink clay taskbar



Very tall pink clay taskbar