

Creating and Testing Skins for CodeTek VirtualDesktop  
Version 1.0  
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This document will describe the layout of skin images and the process of creating skins for CodeTek VirtualDesktop. A skin creation and testing tool, SkinTest, is included with the 1.0 version. This tool will display skins and export them to the format needed by VirtualDesktop.

The skin layout for CodeTek VirtualDesktop centers on the pager portion of the window. The size and shape of the pager window may change with the following factors:

- The resolution and aspect ratio of the display
- The number of desktops
- The number of displays attached to the computer (multi-monitor configurations)

Because the pager size and shape varies drastically between users, it was decided to lay out the skin relative to it. The skin has eleven separate portions:

- Four corners in the upper right, lower right, upper left and lower left
- Four edges on the right, left, top and bottom
- Two widgets, a close button and a preferences button
- A background for the pager window

Here is a layout schematic for a basic CodeTek VirtualDesktop skin:

DocSkin.png "

The four corner images are marked TL for TopLeft, TR for TopRight, BL for BottomLeft, BR for BottomRight. The four edges are TC for TopCenter, RS for Right Side, BC for BottomCenter and LS for LeftSide. The small white circle with the "x" is the close widget (called CloseWidget) and the small white circle with the "p" is the preferences widget (called "PrefWidget"). The pager background (called "PagerBG") includes the thick red rectangle and the gray gradient rectangle.

To create a skin, each corner, side, widget and the pager background must be saved as a separate PNG file, with the following names:

- TopLeft.png
- TopCenter.png
- TopRight.png

- RightSide.png
- BottomRight.png
- BottomCenter.png
- BottomLeft.png
- LeftSide.png
- PagerBG.png
- CloseWidget.png
- PrefWidget.png

You will need a graphics tool, such as Adobe PhotoShop, to create your skin images. After creating the skin images, you will use SkinTest to view your completed skin, test it and export it to a form that will be used by CodeTek VirtualDesktop. If any of these files is missing from your skin, SkinTest will not be able to export it to a valid CodeTek VirtualDesktop skin.

The dimensions of each portion of the skin border are variable. While the example above shows each corner and side having the same dimensions, forming a rectangular frame, the layout of the skin does not require this. For example, the upper corners could be 32 x 32 pixels and the bottom corners 16 x 16. Since each portion is drawn relative to the pager background, you can feel free to shape your frame any way you want. Ideally, you would be able to relocate the close and preference widgets to other locations, and this will be supported in a future version of CodeTek VirtualDesktop. Also, transparency may be used in any of the skin images. This is especially desirable for the close and preferences widgets, as they are overlaid atop the upper left and bottom center portions of the frame, respectively. Any transparency in the CloseWidget and PrefWidget will show the underlying TopLeft and BottomCenter portions, respectively. Any change to the size of the close and preference widgets will also change the activation area for those widgets, so be careful! A good skin design will allow your users to interact with the pager widget.

The frame's edges will scale with the pager background, making the width of the TopCenter and BottomCenter equal to the width of the pager background and the height of the LeftSide and RightSide equal to the height of the pager background. Because of this scaling, make sure that your skin's edge portions are not intricately detailed, or this detail will be lost when the aspect ratio changes. The corner images will not scale, as they "attach" to the pager background on the corners only.

Once your skin images are to your satisfaction, name them appropriately and place them in a folder together. Launch the SkinTest utility. You will see the following window:

SkinTest.png "

The integrated skin is displayed in the right side of the window, as it will be displayed in CodeTek VirtualDesktop. You can view each portion of your skin in the image well in the upper left by selecting the desired portion in the drop-down list under the image well. This view will be updated as the pager is manipulated. The Pager scale, width and height (in pixels) are displayed under the portion. A slider to change the scale of the pager is positioned below that information. Two other sliders to change the relative width and height of the pager background are located to the left and underneath the skin's view. By changing the scale, width and height sliders, you will see what your skin will look like under different user conditions. Any gaps between portions or mis-matched lines will be readily apparent.

To load your skin images, choose "New with Images..." from the File menu. Locate the folder with your skin images and click "Open" when you have selected the correct folder. This should load your images and update the skin display. If any of the files cannot be opened, or are named incorrectly, an alert dialog will appear telling you which file needs to be changed. Manipulate your skin and check for any mismatches.

To give credit where credit is due, enter your name and a URL in the "Skin Author's Information" section and that information will be displayed in CodeTek VirtualDesktop's "Appearance" tab for people who use your skin.

To export your skin to be usable by CodeTek VirtualDesktop, choose the "Save As..." File menu item. Select the location you wish to place your new skin file, set its name (give it a .plist extension), and click on the "Save" button. Next, test the loading of your skin by choosing the "Open Skin plist..." File menu item, locate your skin file and click the "Open" button. This should load your skin and allow you to manipulate it.

We make third party skins available at [http://www.codetek.com/php/virtual\\_skins.php](http://www.codetek.com/php/virtual_skins.php), so send a copy to [codetek@codetek.com](mailto:codetek@codetek.com). Please compress the plist file to save space; you can use the gzip Terminal command or Aladdin Stuffit. It is not necessary to send the source PNGs, but you may send them if you wish; however, please don't send uncompressed images!