Introduction

Levels, in terms of Paint.NET, are a histogram based view on the colors, the amount of a particular color, and how frequent the color is across the image. If one were able to bear through that, it should already be clear that this is a powerful tool that can be used to precisely change the amount of color in an image.

Understanding a Histogram

A histogram is a graphical view of tabulated frequencies. In other words, a histogram is an easy way to see particular data across a map of data. When using Paint.NET's Levels one will find that it is easy to see the colors Red, Green, and Blue (RGB) and the colors Cyan, Magenta, Yellow, and Key (CMYK).

Understanding Color

Before one rushes into Levels, one needs to understand the basic color wheels possible to alter using Curves. RGB is the basic color wheel that is used in Paint.NET. RGB stands for Red, Green, and Blue and makes up for most of the color spectrum visible to the human eye. Likewise, Levels can alter the color wheel entitled CMYK. CMYK stands for Cyan, Magenta, Yellow, and Key (Black). CMYK is not supported for full use in Paint.NET, but using tools like Levels one can still edit these color channels.
Beginning the Tutorial

1. **Ok, first open up Paint.NET. Vista users**, open up the image entitled Waterfall.jpg found in your Sample Pictures in your Pictures folder. If you are using XP, or do not have Sample Pictures, then it is recommended you search for a natural wallpaper. Alright! Now go to Adjustments> Levels or press Ctrl+L.

2. **You should be presented with a small plugin dialogue.** Go ahead and make it full screen for the purpose of understanding the layout of this adjustment. If you have not, go ahead and press the Reset Button to get the default view. If you have done so, you should see near the bottom center check boxes for R G and B. As previously explained, this stands for Red Green Blue. Because all three of these check boxes are currently filled, your current color channel for editing is Key (Black). As well, the two histograms (on the left and right) show the current amount of each color channel in the image.

3. **Now go ahead and uncheck the box for R.** Because the color channels Green and Blue are still left open, they combine to a Cyan color. This means you are now editing the Cyan color channel. Also noticeable is that the Input and Output boxes have changed from a White and Black gradient into a Cyan and Black gradient. Continue to uncheck and check R G and B checkboxes to discover all colors possible. For instance, R + B = Magenta. R + G = Yellow. Also notice that when the color channels change, the colors represented in the two histograms change.

4. **Now then, restore your Levels dialogue box. I want to show you something that shows off the power of Levels, but first I want to get a message across.** Because RGB and CMYK are the only channels available for alteration, they are not the only colors available for alteration. In fact, you have the entire color spectrum at the tip of your fingers! Go ahead and uncheck the R checkbox. You should now be altering the Cyan color channel. Now then, in order to experience the color spectrum drag the top arrow under the Input side of the dialogue box up and down. You are...
Other Uses for Levels

Levels is good for multiple things. A good use is using it to adjust Brightness and Contrast. By adjusting Key you can determine the overall brightness and contrast, or you can focus on one color wheel. As well, Levels is good for changing the seasons from cold and bitter to lush and green and summery by using the Cyan color channel. If you find a good use, share it with others!

Conclusion

Yes, that is about all there is to know about Levels. I hope you have learned something new about Paint.NET, and I think if you master this technique your image editing will go farther than you believed possible. Also note that this tutorial was completely inspired by the Curves tutorial. I recommend reading that tutorial as well because you can use Curves to map color channels onto an image. Thanks for reading! I would love to hear your feedback, and if you find a mistake let me know and I will be sure to sort it out.