

Graphic Recording And Documenting Tools

Karthik Suresh

ABSTRACT

I am often asked what tools I use to create drawings, models and documents. This paper sets out a few that fit into my personal workflow.

1. Introduction

In the course of writing a blog, which you can find at www.karthik-suresh.com, drawing over 1,000 images and creating hundreds of models, I have settled on some tools that work for me and a customised workflow that helps with carrying out a range of projects.

I use a Linux platform for this kind of work because I prefer to use free/open-source software rather than proprietary applications. In addition, you can extensively automate and speed up work on a Linux platform in a way that's much harder on Windows.

2. Paper

I'm going to start this list with paper because it's important not to forget that it's still just about the simplest and most useful tool out there. Many of my drawings start out as rough sketches on paper before going onto the computer.

3. MyPaint

The application I use the most for computer graphics is MyPaint, which you can find at www.mypaint.org.

MyPaint was designed for digital artists and is useful when you want to just use a brush and canvas. It is designed to work with Wacom graphics tablets.

I use a small, flexible tablet made by Trust (www.trust.com). The newer model of this tablet, which you see on the website, works better with MyPaint on Windows than the older one. The older one, however, works better on Linux and you can pick up models on Ebay. MyPaint does not work particularly well on the Microsoft Surface with a pen, unfortunately.

4. Krita

Krita (www.krita.org) is another free and open-source painting program. It has many of the same elements that you will find in MyPaint but has the added benefit of being able to select and move sections of your artwork. Unlike MyPaint, the canvas size is set at the start but you can easily change that.

5. Microsoft Surface

The Surface tablet PC is a flexible and easy to use drawing tool and has a good quality pen. You can use that with the built in whiteboard and it's also useful if you want to use the whiteboard facility in Teams for quick note taking and sketch-noting.

6. Graphviz

Graphviz (www.graphviz.org) is open source graph visualisation software. I often have to convert notes of conversations into a model for discussion and rather than use something like Power-Point or Visio I find it easier to code a graph using Graphviz — another example of where programmatic tools make tasks easier in Linux. It's not the prettiest tool in the world — far from it — but it's fast.

7. Groff

To create documents, such as the one you're reading now, I use Groff (www.gnu.org/software/groff). Groff is a typesetting system that reads plain text with formatting commands to create formatted documents. The primary advantage of Groff in my workflow is that you can stitch together images, models and text very quickly to create a finished document — a task that takes hours in other environments.

8. Editors

I write first drafts of almost everything in `ed` and blog posts in `emacs` using `org2blog`. I use `vi` for editing and changing things after the first draft is done.

9. Conclusion

This paper is a short introduction to the essential tools that I use in my workflow. I've chosen them because they suit my primary objective of creating a fast route through from capturing thoughts to producing documentation for further work. They will work best on a Linux platform — it will probably be easier to use a different workflow if you work primarily on Windows.

About the author

Karthik Suresh is a Management Consultant who helps customers with strategy, technology, sustainability, research, innovation and knowledge management projects. His experience includes working with large and small organisations to select and implement strategic decision systems, improve and develop management capability, and deploy risk management, IT, communications and information systems projects.

Please feel free to connect on LinkedIn or read more at www.karthik-suresh.com