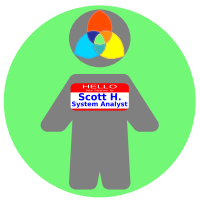
This document is incomplete. I will work on it over time and remove this notice when finished.

System SA High Level Design and Map



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Overview

I describe and map the high level design of my various projects that form System SA. I show where the pieces can be found, how they fit together, how I expect they will be used, when, and by who.

Orientation

It is easy to get lost within complicated and interrelated systems. There are many parties vying for our attention and resources. When lost in new or unfamiliar situations, we orient ourselves with a map and compass. Simply reviewing the streams of information passing by does not give us enough information. When lost at sea or in the forest, this is literal, and a 2D map can help. When navigating, fixing, changing, or imagining new systems, regular 2D maps are often not sufficient. I've spent five years developing mapping tools that are flexible, yet easy to use. The features include visual indicators, auto-routing, and integration with narration. It is a complicated, interrelated system used to model the same, but I've done my best to make it useful without servers or admins.

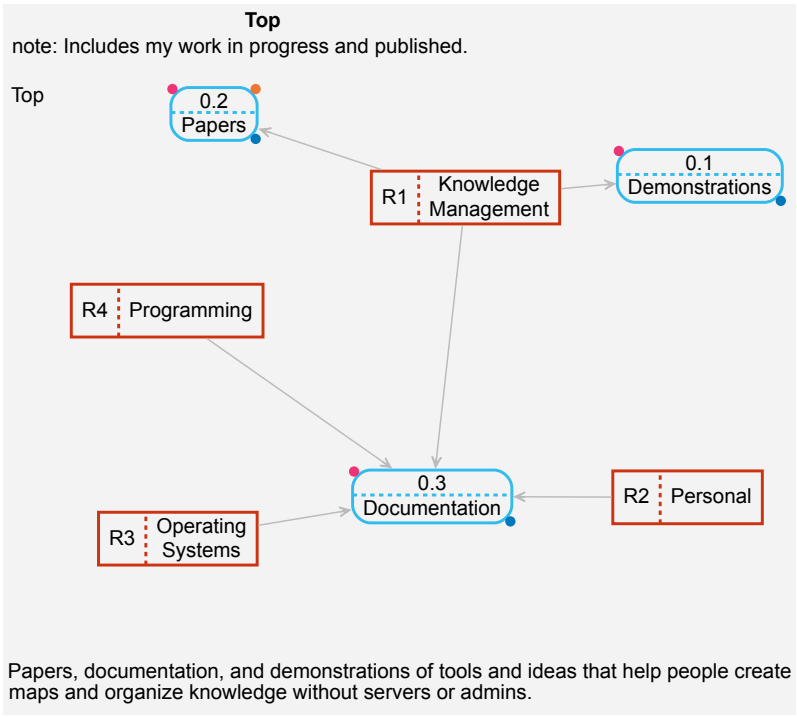

Figure 1: Top

We tend to "chunk" as we read; we glob on to bits that catch our eye. While it is possible to digest a paragraph in a well-ordered way, having inline icons helps our natural instincts. It is knowledge reverse judo. are the inline icons for this paper. They are the same in the PDF and web versions. At the top of systemsa.net, there is a that brings up a logical map like Fig. 1. I use this to move from a narrative to map view. is fully described in , the Logical Map How-to Guide. Icons have a URL, and depending on your application capabilities, just click for the meaning. This document that you are reading is represented by , both the narrative and the that combines logical and physical relations of data flow. At the top level are broad categories. The second level can be accessed by clicking on the body of the node, and lists artifacts and efforts within that category. The third level down shows the physical persistence information and flow. A is a URL associated with the entity. Click on it to navigate to it in a web browser. means the general idea of using triples for system analysis. The letters stand for Triple System Analysis, the title of the paper. means the idea of using combined data and material flow at time of crisis. means collaborative streaming of logical maps using nostr event objects over MQTT. I will assume in this paper that the reader has reviewed the target URL behind the icons. Notice that I use a much more sophisticated version of icons and navigation in .

Technical Design

There are design decisions for that are absent, not fully covered, or have changed slightly in my other documentation. I will discuss these in this section. My overall goal is to provide the reader everything they need to continue this work without my ongoing guidance.

Floppy PNG

I experimented quite a bit with both performance and running live websites to come up with the final format of Floppy PNG.

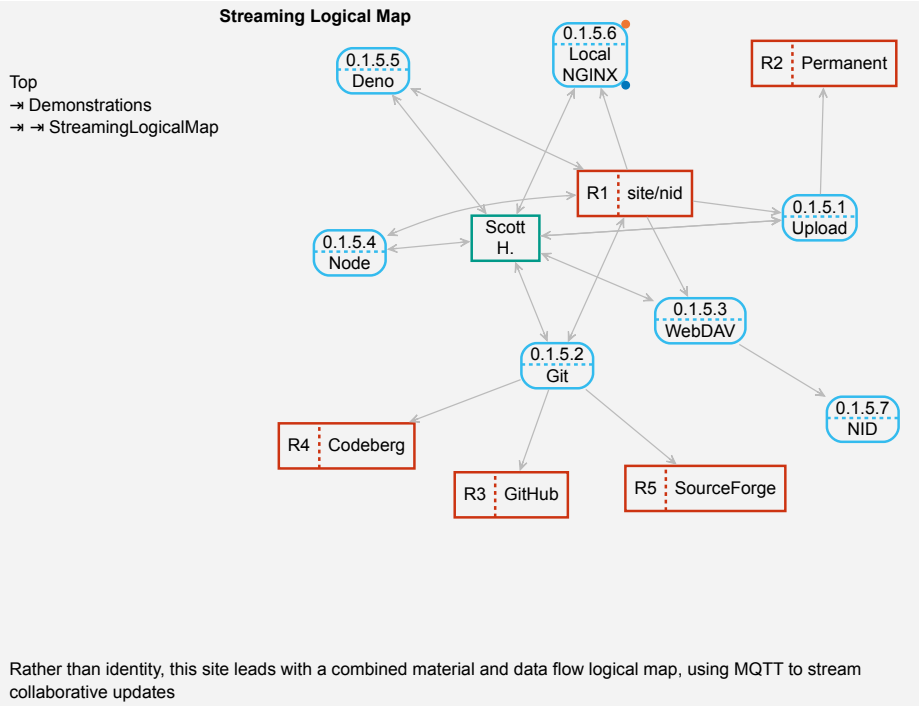

Figure 2: FloppyPNG

I introduce the idea in , and the Floppy PNG website serves as the technical description and validation (H. 2025a) (H. 2025c). As I write this, most sites I run have different versions, and some have none at all. Over time I will migrate them. Fig. 2 shows a typical at detail. The Upload process uploads a Floppy PNG image to Permanent (H. 2025b). In this case, this is a demonstration of . When viewing in a web browser, click on the symbol at the lower left edge of the node to browse to the referenced resource. The entire demonstration is contained in the Floppy PNG file on Permanent. Likewise, this document and the associated is uploaded to Permanent as a Floppy PNG.

The Local NGINX entries in Fig. 2 point at the correct localhost HTTP TCP port. Lst. 1 shows what I have put in my own local configuration in `/etc/nginx/sites-available`.

Listing 1 Streaming Logical Map NGINX config

```
server {
  listen 4016;
  server_name localhost;
  root /home/divine/websites/site/nid;
  index noidentity.dev.page.html;
  location / {
    try_files $uri $uri/ =404;
  }
}
```

Pandoc Toolchain

I use Pandoc to generate both HTML and PDF versions of the documents.

Deno

I use Deno for creation and maintenance of the documentation and maps.

Bibliography

H., Scott. 2025a. “Floppy PNG.” 2025. https://floppypng.com/.
———. 2025b. “Permanent Archive of Scott h.” 2025. https://www.permanent.org/p/archive/04sh-0000.
———. 2025c. “Acodrst/Fpng-Sign-Serve.” https://github.com/acodrst/fpng-sign-serve.