The Gears of Minkepedia.org

An introduction to the technologies and design principles behind Minkepedia

Hans-Joachim Belz
achim@minutefforts.com

Agenda

This is a brief overview of the technologies and basic design principles behind the social knowledge mapping platform Minkepedia.

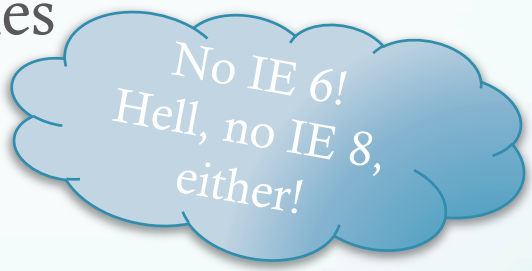
For an introduction to what Minkepedia actually wants to achieve for its users, see theses slides:

http://www.minkepedia.org/slides/minkepedia-slides.pdf

Or visit http://www.minkepedia.org

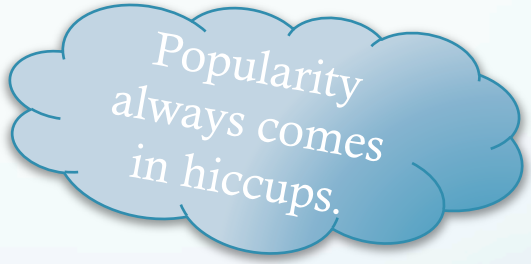
Main Drivers: User Experience

- Rich visual user experience
  - Explorative Prototyping with RAD tool
  - Interactive knowledge maps make up the core of the UI
- Aggressive use of available web technologies
  => support only cutting edge browsers
- Support for mobile use of the platform
  (both via web and native apps)



Main Drivers: Minimal Effort

- Minimal investment into infrastructure
  - Platform Administration (setup, update, backup, security, etc.)
  - Standard Functionality (e.g. account management, messaging, etc.)
- Smooth ramp up of load (user and data)
- Cheap scalability for peak times
- Design cheating for minimum working efforts
  - Take deliberate shortcuts to working functionality
  - Fix bad smells when the new functionality has proven worth the effort



Technology Decisions

PaaS

Google App Engine

Rich Client Platform

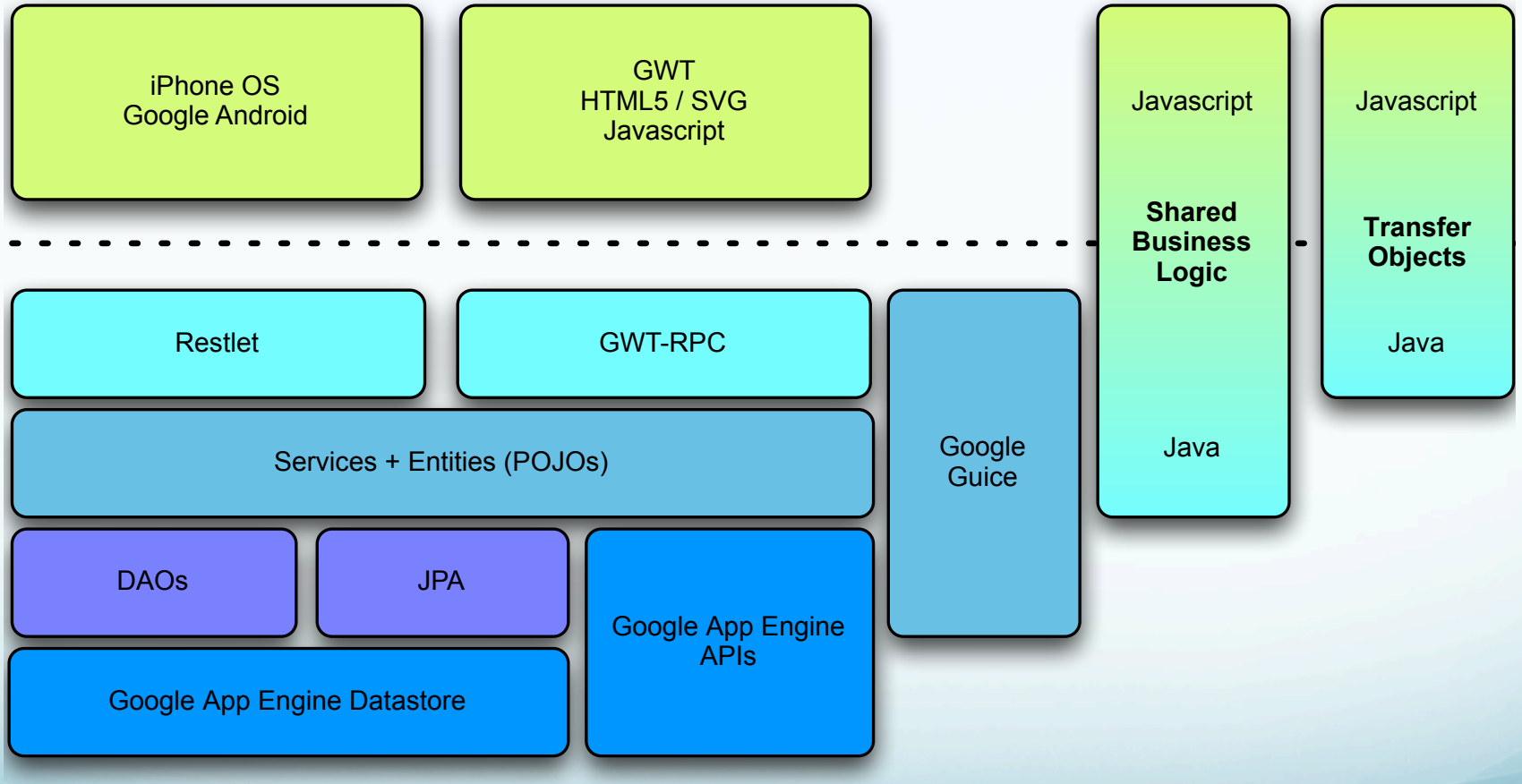
Google Web Toolkit

RESTful Web Services

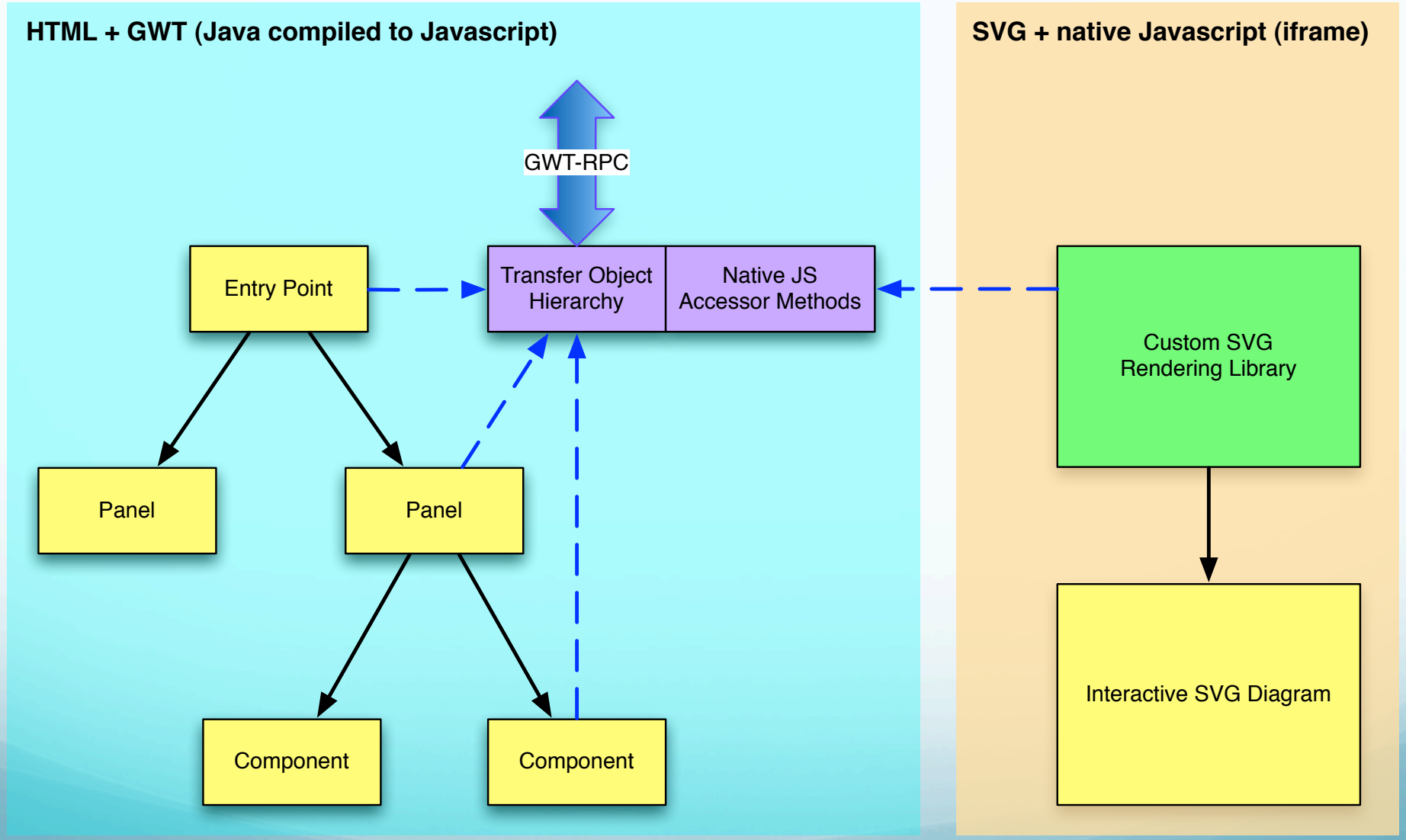
Restlet

Interactive Visualization

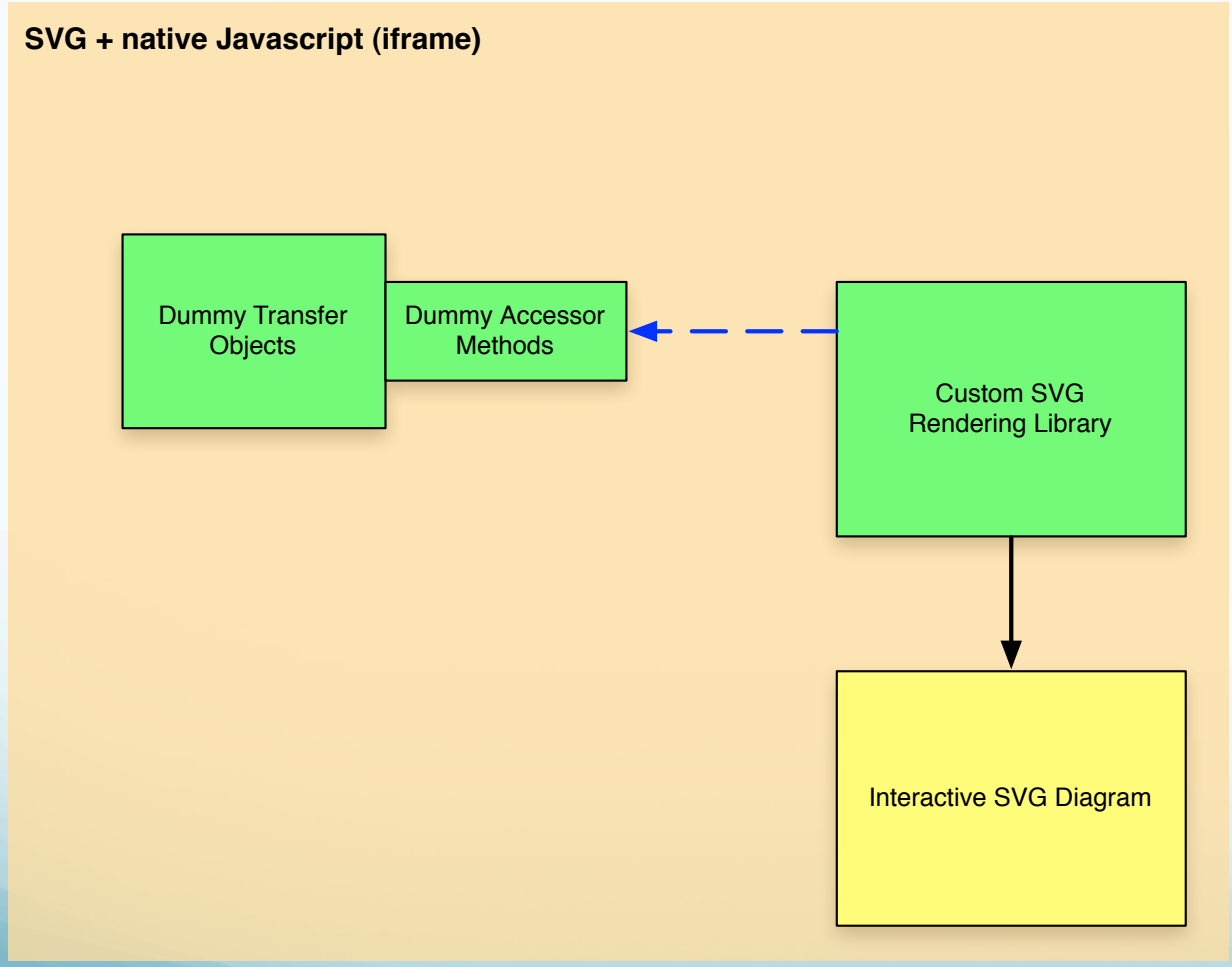
Technology Stack



The web frontend

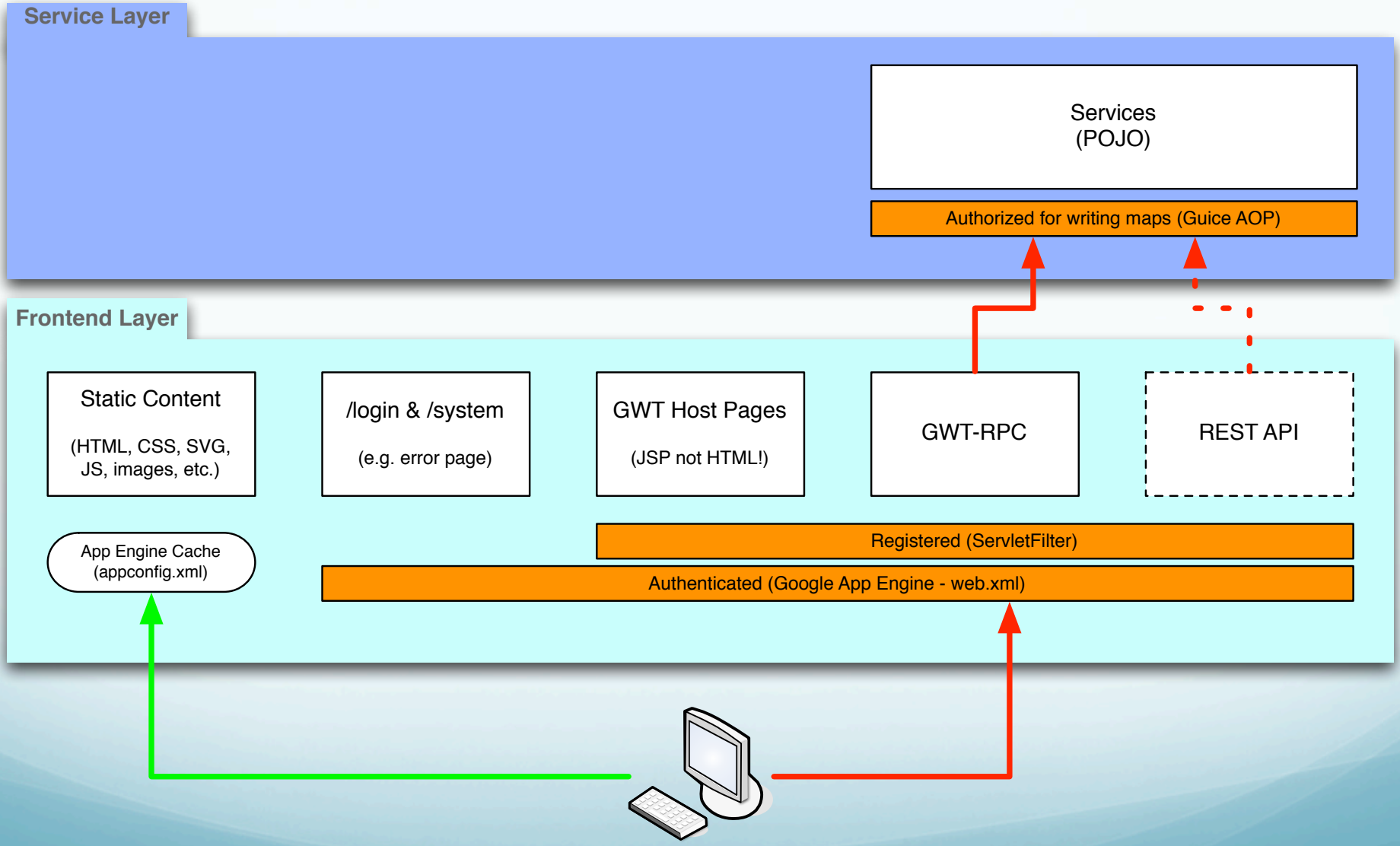


Mocked SVG Development

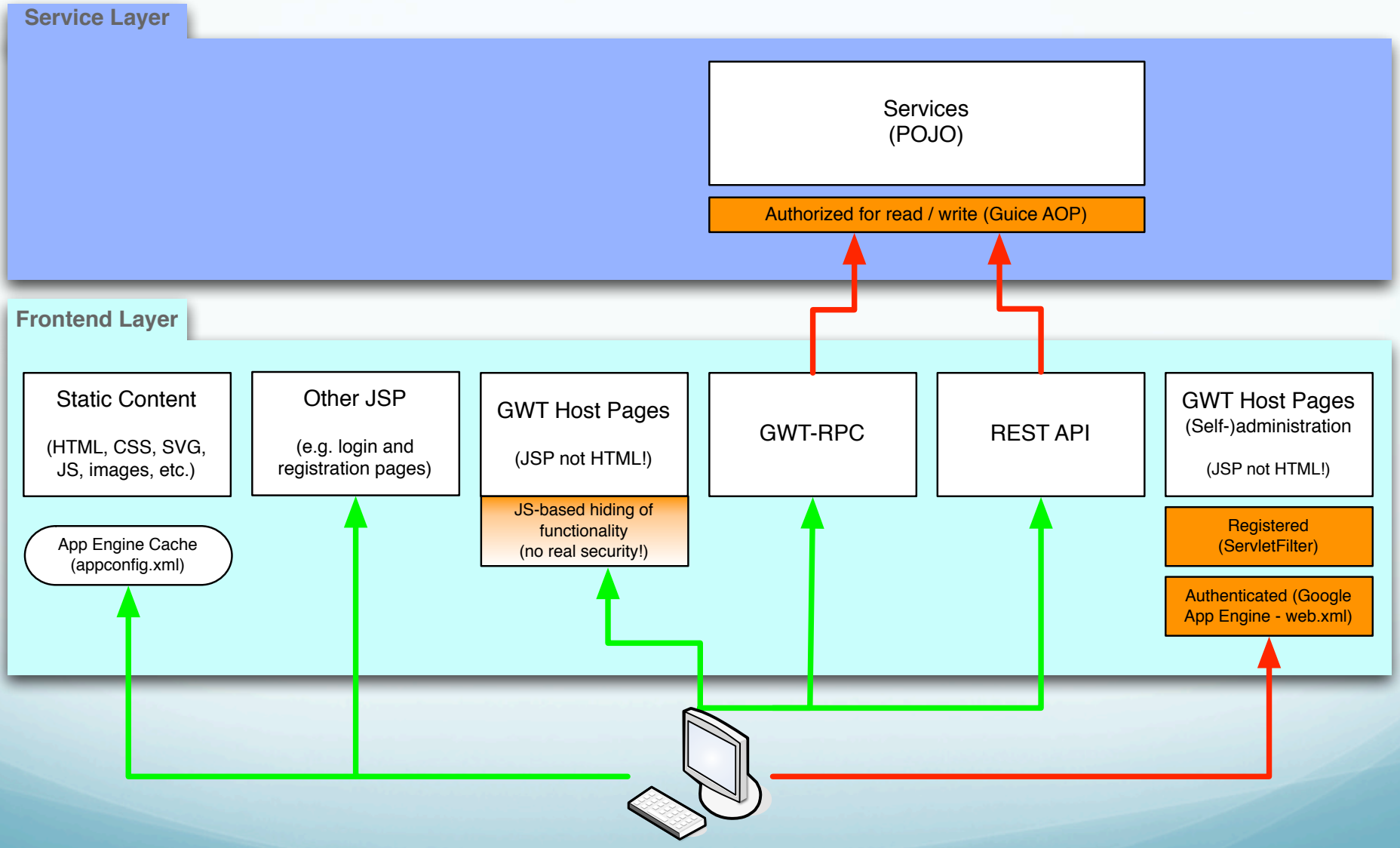


- Static SVG file
- Mocked map data
- No server needed
- No GWT knowledge needed
- Easy definition of test cases for the rendering lib

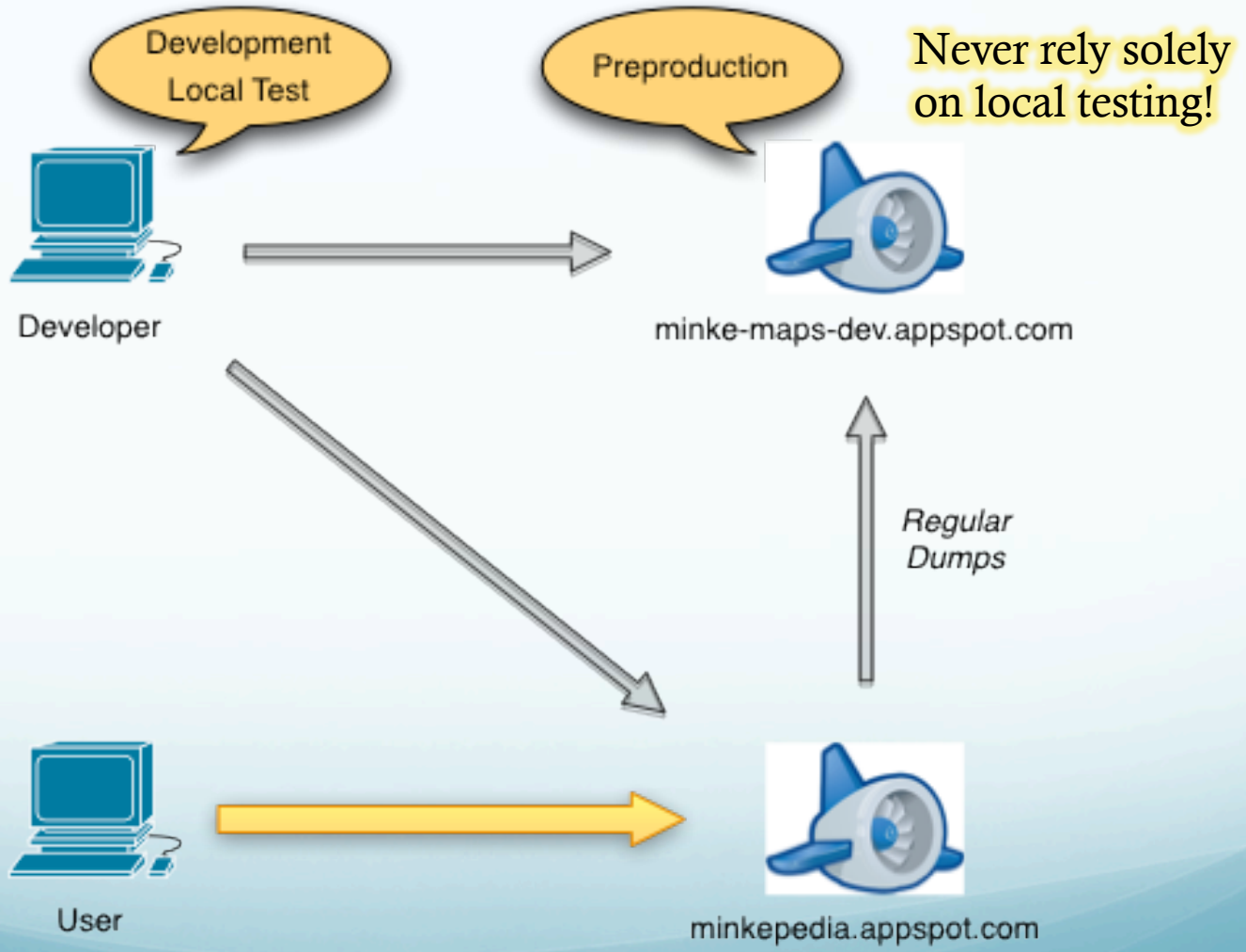
Current Security Model



Security with unrestricted read



Test & Deployment



Roadmap

- Next Steps:
  - General read-only access
  - New UI (support for mobile Webkit-based browsers)
  - Clean up of service layer
  - Maven-based build

➔Launch of the OpenSource Project (Q2/11?)

General public access only after implementing safeguards against vandalism!

Thank you for your attention!

Stay in touch:

http://www.minkepedia.org

http://www.twitter.com/minkepedia

achim@minutefforts.com