ka-Map

an interactive web-mapping application

Authors: Paul Spencer, Lorenzo Becchi
what is ka-Map?

• Key Features
  – Client Side: GUI Interactivity
  – Server Side: Tiling System
What is ka-Map?

- Other features:
  - Google-like interface
  - Continuous panning
  - No page submit
  - Interactive scalebar, legend and keymap
  - Interactive layer control
  - Keyboard navigation
  - Multiple map access
technical features

- **Client Side:**
  - built using AJAX principles
  - Multiple interfaces (GUIs) -> DHTML
  - extendable functionality via tool API

- **Server Side:**
  - flexible configuration based on MapServer
  - multiple maps, layers (groups)
what is AJAX?

• Asynchronous JavaScript and XML
  – coined by Jesse James Garrett
  – not a technology, but a group of technologies that are used together
    • CSS
    • DHTML
    • XmlHttpRequest (is this necessary?)
    • XML, XSL
What is AJAX?

How does ka-Map use tiling system:
- To maintain high performances only viewport tiles are downloaded from the server.
Dragging the map: railroading tiles
Performance related issues

- Standard Mapserver Application:
  - Drawing on the fly is too slow
  - Big traffic means poor performances

- Ka-Map tiling system:
  - Tiled images are cached on the server so maps are drawn just once
  - Big traffic affect only web server performances
Interfaces: Standard Interface
Interfaces: Embedded Interface

Ka-Map!

Ka-Map! è un'applicazione AJAX che offre una interfaccia intuitiva per navigare le mappe prodotte con Mapserver.
Attribution-NonCommercial-ShareAlike 2.5

You are free:
- to copy, distribute, display, and perform the work
- to make derivative works

Under the following conditions:

**Attribution**. You must attribute the work in the manner specified by the author or licensor.

**Noncommercial**. You may not use this work for commercial purposes.

**Share Alike**. If you alter, transform, or build upon this work, you may distribute the resulting work only under a license identical to this one.

- For any reuse or distribution, you must make clear to others the license terms of this work.
- Any of these conditions can be waived if you get permission from the copyright holder.

Your fair use and other rights are in no way affected by the above.

This is a human-readable summary of the [Legal Code (the full license)](http://creativecommons.org/licenses/by-nc-sa/2.5/legalcode):