

MapCat Overview

What it is?

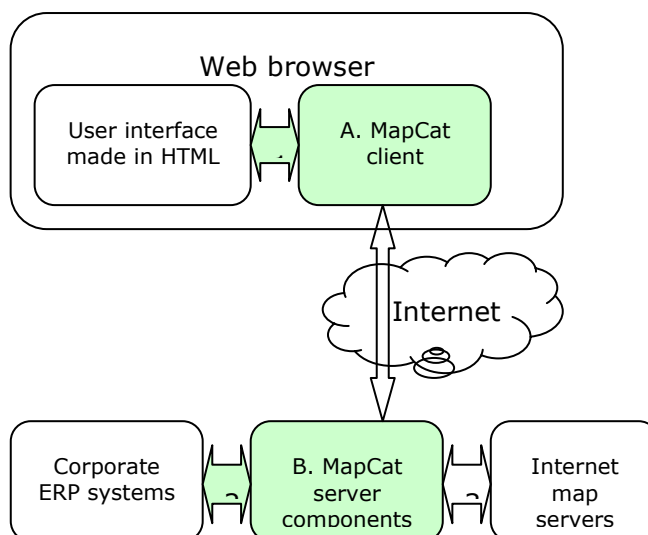
MapCat is a SDK (Software Development Kit) meant **for system integrators to create web-based GIS applications** of their own. MapCat is capable of combining raster and vector data from different data sources. It offers also advanced **set of data modifying tools** in browser. Using MapCat, quick access to the data from different sources is guaranteed and for general GIS functions like add or edit points, lines, polygons, no special software is needed any more.

How it works?

MapCat (MC) consists of a powerful, still lightweight client, and a server-side SDK (Medium and Pro versions). Both are fully configurable through xml/java/javascript API.

MC client SDK consists of JavaScript API and Adobe Flash component for handling high level vector graphics. Flash is a widespread platform for creating web applications with excellent user-friendliness and multimedia support.

MC server-side SDK is the gateway for system integrators for joining together corporate databases, industry standard GIS databases (e.g. ESRI ArcIMS, MapInfo MapXtreme, Oracle Spatial etc.), and user-friendly client interface.



MapCat corresponds to OpenGIS (WMS, WFS, OpenLS) service standard and uses XML for data communication between MC client/server (or directly customer databases). MapCat is capable of using raster-tiling technology for back-drop maps.

Why it is good for?

System integrators do not have to develop, maintain and upgrade base components for GIS solution and thus **can be more concentrated to their own core business/products**. Still they have enough free hands to design and develop GIS applications within their products and services almost without no limits. Application made by using MapCat meets following conditions:

- Interactivity
- Easy to configure
- Easy to integrate into existing ERP systems
- Good usability and looks good
- Secure
- Low cost

MapCat versions and success cases

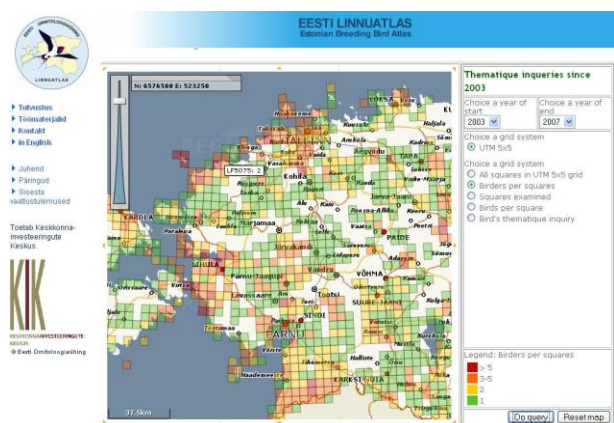
It is possible to use three versions of MapCat SDK according to the needs of application, its purposes and functionality:



MapCat Light for applications with basic GIS needs: digitize/display business objects, POI-s, tourism routes etc on the map, navigate the map, perform address search, measure distances, print pages etc. MapCat Light is widely used by real-estate and tourism portals.

Success case: Real Estate map application made by Affecto (biggest GIS provider in Finland):

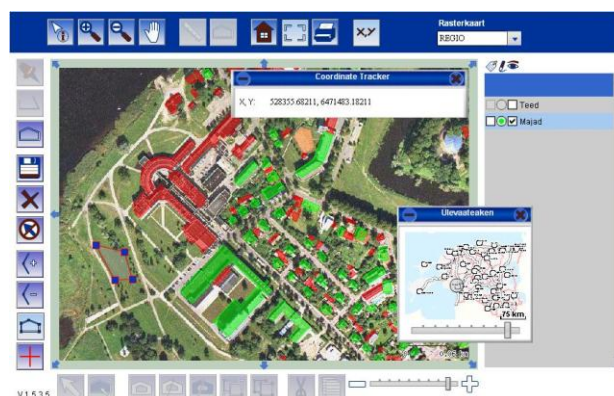
<http://www.gva.fi/gva/Main.do>



MapCat Medium allows in addition to handle more complicated vector objects (polylines, polygons, shapes, route animation). Solutions for vehicle tracking, advanced tourism portals (tourism paths, restricted areas, parks etc), GIS registrars who want expose their GIS data to the web, create thematic maps etc.

Success case: Estonian Breeding Bird Atlas:

<http://www.eoy.ee/atlas/>



MapCat Professional brings functionality common to desktop GIS software to the web for customers with professional GIS functionality needs. Applications for different GIS registrars (field, forestry, infrastructure etc).

Success case: MapCat PRO demo-site, software has been used by biggest IT integrator in Finland

Tietoenator: <http://products.regio.ee/mapcat/>

For additional information and demos, see:


<http://veebikaart.blogspot.com>




<http://veebikaart.blogspot.com/search/label/Live%20demos>

<http://veebikaart.blogspot.com/2007/03/flashtile-arenduskeskkond.html>

MapCat features

The following table gives an overview of the MapCat features.

	MapCat Light	MapCat Medium	MapCat Professional
General navigation and location search			
Zoom-box; map requests by bounding box parameters (WMS as standard)			
Zoom in or out using the mouse scroll wheel; dynamic zoom, using the browser cache (raster tiling); dynamic zoom-bar; zoom to mouse pointer, animated pointer.			
Pan - drag the map view in any direction by "crabbing" the map with mouse or using the arrows			
Navigation window, zoom and pan map from the navigation window			
Highlight search results (points) with animated symbols			
Highlight line objects as search results (routes etc)			
Highlight areas (shapes, polygons) as a search result			
Determine the zoom level for the search result depending on the location of the object			
Ruler			
Other measurement tools (radius, rectangle)			
Print map, send by e-mail, save link etc			
Support for base maps (raster in browser) and databases (vector in browser)			
Tiling support			
WMS support			
Pre-existing drivers for Mapxtreme, ArcIMS, Minnesota Mapserver, Oracle Spatial, PostGIS, MySql, SIAS			
API to create drivers for different mapservers and databases (if not pre-existing), API to switch on and off map layer management on raster map			
Define vector layers, layer style and symbols; center to object, objects or layer, mouse-over effects and tooltip information			

	MapCat Light	MapCat Medium	MapCat Professional
Display point objects; simple line objects (tourism routes, path's etc);			
Display area/polygon objects (forests, fields, cadastre units etc); display more complex polyline objects (track history, route optimization, water or gas pipes, electricity cables etc); display mixed layers			
Html-support inside tooltip window (to show pictures, tables etc)			
Track animation, play-pause-rw-ff			
WFS Support, XML/GML optimization			
Vector data on-fly generalization, optimization, LDAB support, data locking			
Zoom layering while displaying vector information			
Digitizing and modifying vector data using MapCat client			
Mouse movement control in digitizing; finish digitizing with a double-click			
Undo in last node digitizing			
Undo in object digitizing			
Edit nodes (add, remove, reshape object)			
Point object digitizing			
Line/polyline object digitizing			
Digitizing polygons			
Digitizing shapes (circle, rectangle)			
Group/ungroup objects, multi-objects support			
Advanced digitizing (snap nodes, move object, create holes, cut and copy objects from one layer to another,			
Pre-defined flash menu and configurable buttons			