

GeoExt2

PAST, PRESENT AND FUTURE



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MARC JANSEN



- Developer and project manager
- Core developer of
 - OpenLayers / ol3
 - GeoExt / GeoExt2 / GXM
 - SHOGun
- PSC member of GeoExt & SHOGun
- Author 'OpenLayers' (German)
- OSGeo Foundation Charter Member

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@terrestris



@terrestrisde

- terrestris.de
- OpenSource GIS from Bonn, Germany
- Development, Projects & Support/Teaching
- Consulting, Planning, Implementation & Maintenance

PAST

GeoExt

- JS framework to build "Rich Web Mapping Interfaces"
- Based on OpenLayers und ExtJS
- Enhances ExtJS with spatial components
- OpenSource, BSD, © OSGeo
- Since 2009-03-25

GeoExt 1

- ExtJS 3
- OpenLayers 2

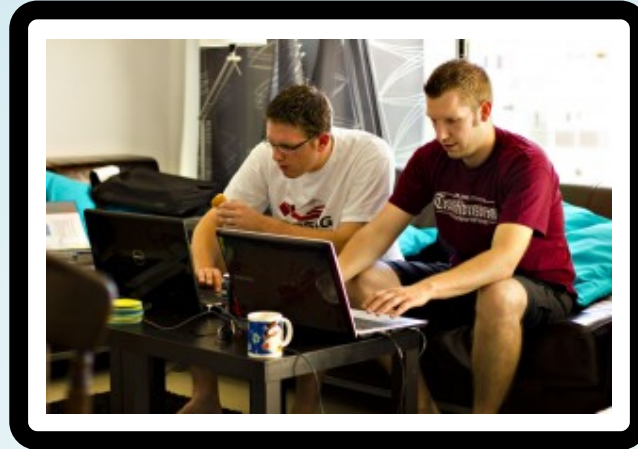
ExtJS 4

- Released in 2011
- Great new features
 - MVC
 - dependency management
 - single-file builds
 - ...
- Backwards incompatible ☹️

A close-up photograph of a man with short, graying hair and a light beard. He has a wide-eyed, intense expression, looking upwards and to the right. His lips are slightly pursed together in a small, awkward smile. The background is dark and out of focus, suggesting an indoor setting with wooden paneling.

DO WANT

INTERNAL CODESPRINT



OCTOBER 2011
MALLORCA, SPAIN
1 WEEK

INTERNATIONAL CODESPRINT

- Goal: Compatibility of GeoExt with ExtJS 4
- April 2012, Bonn, Germany, 1 week
- 20 participants
- sponsored
- Result
 - 1. alpha-release
 - New API docs
 - Public examples



PRESENT

GeoExt2
IS THERE!

YOU SHOULD USE IT!

GeoExt2

- v2.0.1, March 2014
- Ext JS 4.2.1
- OpenLayers 2.13.1
- <https://github.com/geoext/geoext2>

WHAT'S NEW?

- Completely integrated into ExtJS 4 paradigms
- E.g.

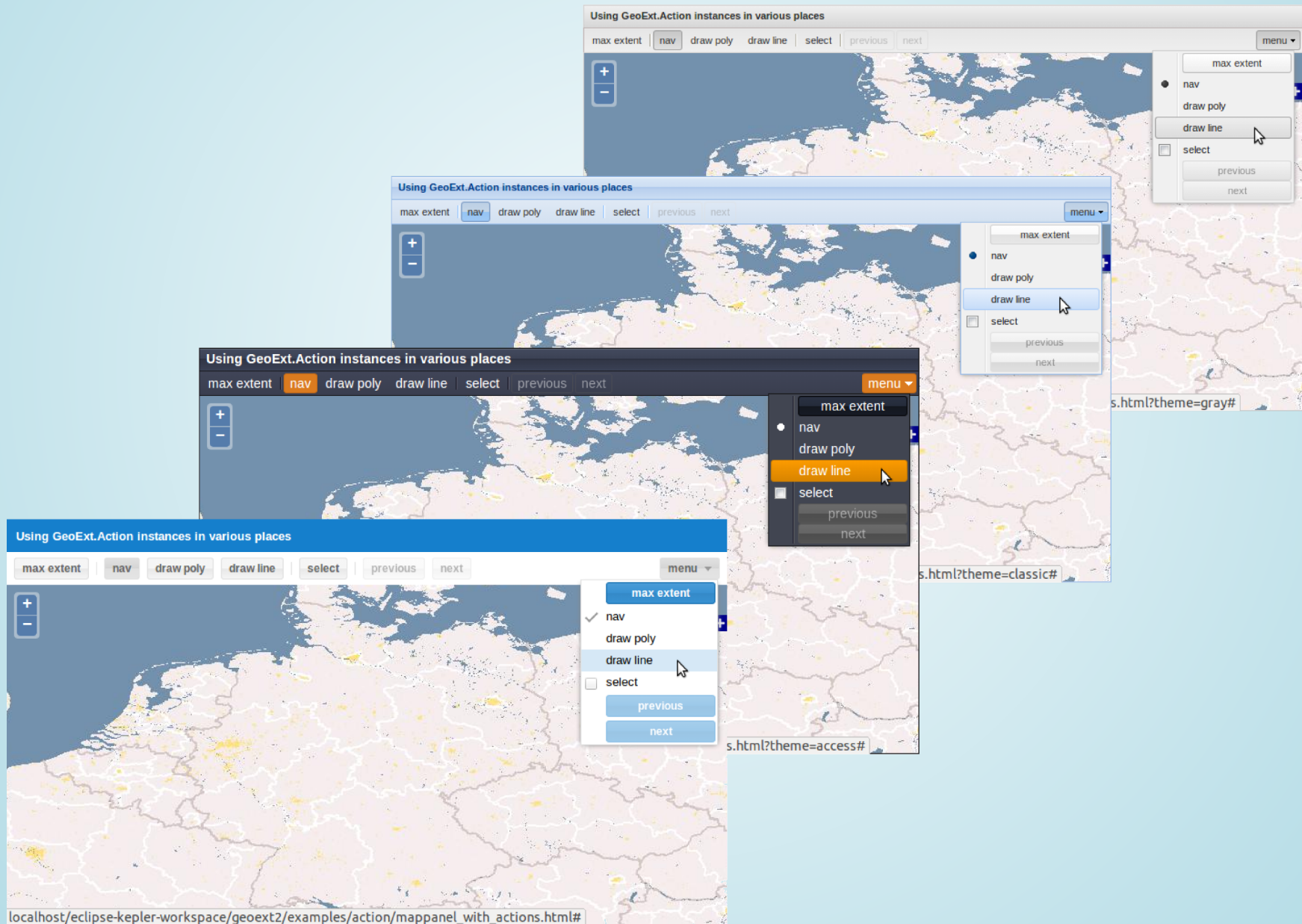
MVC-PATTERN

Theme:

SENCHA BUILD TOOLS

- MVC-Example (ExtJS + GeoExt)
 - ~ 5.3 MB → ~250 KB
 - Savings: 95 %
- Huge GeoExt-app (+Closure Compiler, +gzip)
 - ~ 8,1 MB → ~700 KB
 - Savings: 91 %>

EASIER THEMING



API DOCUMENTATION

GeoExt 2.0.1 Documentation (incl. ExtJS classes)

Search

Map

By Package

By Inheritance

Show private classes

API Documentation

Generated on Fri 11 Apr 2014 09:15:39 by JSDuck 5.3.4.

HEADLESS TESTING

```
window/Popup.html test_hidePopup(t):
PASS 990) Reusable popup is visible when open and inside the viewport
PASS 991) Reusable popup is hidden when open and outside the viewport
PASS 992) Reusable popup is hidden when closed and inside the viewport
PASS 993) Regular popup is visible when open and inside the viewport
PASS 994) Regular popup is hidden when open and outside the viewport
window/Popup.html test_Popup_fixedPosition(t):
PASS 995) fixed position set correctly
PASS 996) popups with fixed position 'bottom-left' do not have an extra CSS class
PASS 997) fixed position set correctly
PASS 998) popups with fixed position 'bottom-left' do not have an extra CSS class
PASS 999) fixed position set correctly
PASS 1000) popups with fixed position 'bottom-left' do not have an extra CSS class
PASS 1001) fixed position set correctly
PASS 1002) popups with fixed position 'bottom-left' do not have an extra CSS class
Version.html test_geoext_Version_environment(t):
PASS 1003) GeoExt.Version.environment is defined.
PASS 1004) GeoExt.Version.environment contains info about GeoExt.
PASS 1005) GeoExt.Version.environment contains info about OpenLayers.
PASS 1006) GeoExt.Version.environment contains info about ExtJS.
Version.html test_geoext_Version_version(t):
PASS 1007) GeoExt.Version.version is defined.
PASS 1008) GeoExt.Version.version returns a string starting with 'v2'.
Version.html test_geoext_version(t):
PASS 1009) GeoExt.version is defined.
PASS 1010) GeoExt.version equals GeoExt.Version.version.
PASS 980 tests executed in 54.581s, 980 passed, 0 failed, 0 dubious, 30 skipped.
marc@ubuntu:~/eclipse-workspace/git-repositories/geoext2[headless]$
```

CONTINUOUS INTEGRATION

GeoExt 2 – JavaScript Toolkit for Rich Web Mapping Applications

GeoExt is Open Source and enables building desktop-like GIS applications through the web. It is a JavaScript framework that combines the GIS functionality of [OpenLayers](#) with the user interface of the ExtJS library provided by [Sencha](#).

Version 2 of GeoExt is the successor to the GeoExt 1.x-series and is built atop the newest official installments of it's base libraries; OpenLayers 2.13.1 and ExtJS 4.2.1.

About GeoExt

Since version 2, GeoExt is based upon the newest Ext JS 4.

This means GeoExt can be used just like any other Ext 4 component, and applications making use of GeoExt 2 also profit from Ext JS enhancements like charting, a harmonized API with Sencha Touch and a sophisticated single-file build tool.

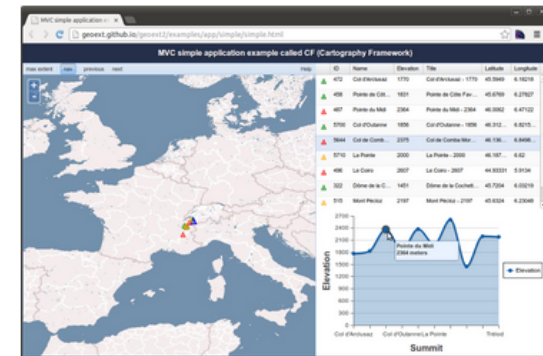
GeoExt 2 has been in the making for a long time, though most of the code has been written during [a code sprint back in May 2012](#). We are deeply grateful that [our sponsors](#) helped make GeoExt 2 happen.

Now, have a look at the examples below, read the [API documentation](#), the [API documentation \(including ExtJS classes\)](#) or [checkout the code](#).

Download

The current released version of GeoExt is 2.0.1.

Please download [GeoExt 2.0.1](#), use it, and give feedback. Thanks!



<http://geoext.github.io/geoext2/>

EXAMPLES

MAPFISH PRINT

Theme:

Setting the Print Extent on the Map Interactively

This example shows how to set the bounds of a printable PDF interactively with a dynamic print extent rectangle. It requires the [MapFish](#) or [GeoServer](#) print module.

Drag one of the handles to control the scale. Grab one of the corner handles at its edge to rotate the extent. Hold the SHIFT key to rotate in 45°

LEGENDTREE

Theme:

EASY LEGENDS

GeoExt.LegendPanel

Theme:

This example shows the how to create a LegendPanel that autopopulates with legends from a map that has already been created.

The js is not minified so it is readable. See [legendpanel.js](#).

...

COMPLEX TREES

Theme:

SLIDERS

GeoExt.LayerOpacitySlider

The LayerOpacitySlider allows control of a layer opacity using an Ext.Slider. It is also possible to add a special tooltip plugin, LayerOpacitySliderTip, which will show the opacity value while dragging the slider (the content is configurable).

In this example, the slider in below the map is in aggressive mode: the opacity is changed as soon as the slider is moved. The slider inside Map 1 is not aggressive: the opacity is changed when the slider is released. Also, the slider below the map is an inverse slider, which means it uses

Theme:



OGC-CAPABILITIES

Theme:

WMS Capabilities Example

This example shows how to load a grid with data from a WMS capabilities document. You can double-click on a row to see a map preview of the layer.

Note that the js is not minified so it is readable. See [wmscapabilities.js](#).

FUTURE



Roads? Where we're going we don't need...

NEAR FUTURE

- Release v2.0.2
- Advertising
- Even easier contributions
- Take over geoext.org again
- Better headless testing

NOT-SO-NEAR FUTURE

- What's with
 - Leaflet?
 - OpenLayers3?
 - ...
- ExtJS 5?

MULTIPLE-MAP-LIBRARIES?



<https://github.com/geoext/geoext2/wiki/future-development>

ExtJS 5?

The most basic sencha-command example with GeoExt 2

GeoExt2 works with ExtJS 5

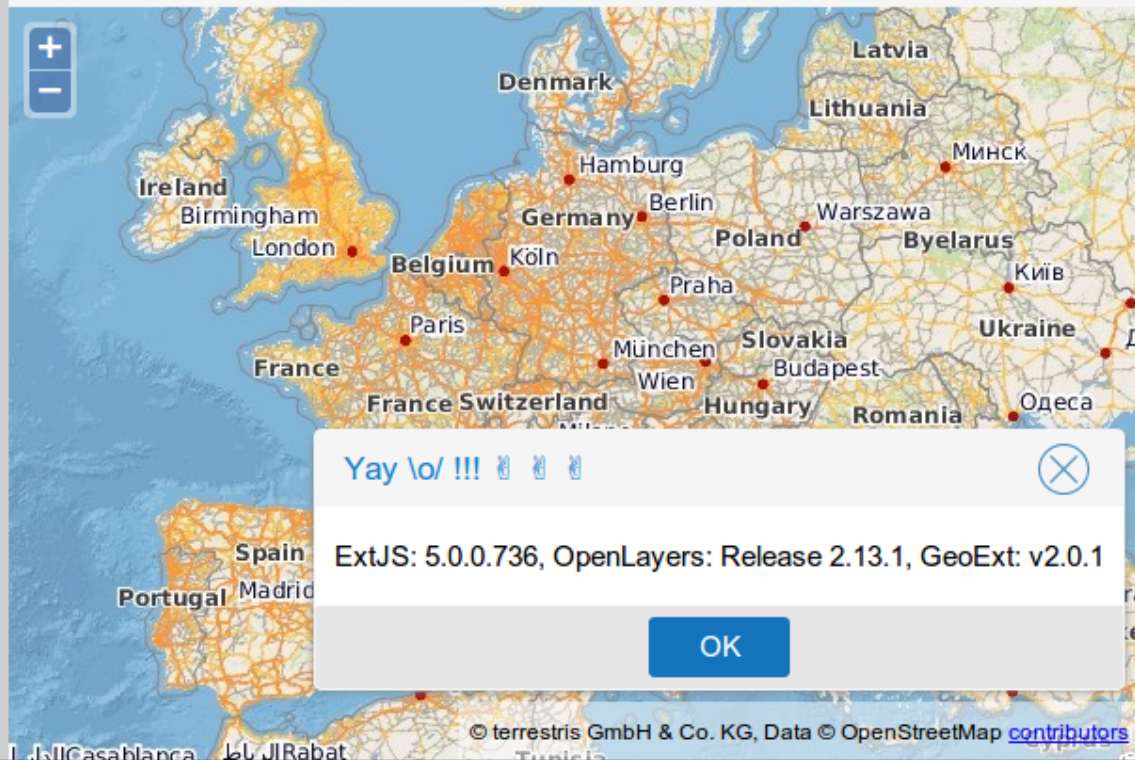
Click me for version information

On the right you see an instance of a `GeoExt.panel.Map` embedded in a border-layout provided by ExtJS 5.

The theme used in this example is called "crisp".

Current center of the map


The GeoExt.panel.Map-class



ExtJS 5? DOABLE!

Compatibility with ExtJS v. 5.0.0

77 tasks (23 completed, 54 remaining)

afi by marcjansen on 11 Jun  extjs5

 #274

THANK YOU
QUESTIONS /
REMARKS?

Imprint

IMPRINT

- Author: Marc Jansen, terrestris GmbH & Co. KG, jansen@terrestris.de
- License: [CC BY-SA 4.0](#)
- This talk is a derived work of the talk "GeoExt2 — Was ist neu und was bringt die Zukunft?" by Christian Mayer & Marc Jansen, held at the FOSSGIS 2014.
- [Slideshow \(HTML5\)](#)
- [Slides \(PDF\)](#)