Web Map Printing in GeoExt

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Printing?

Doesn't my browser have a PRINT button?
Yes, but ...

... some old, but still widely spread browsers don't do a good job printing stacked images/layers.
Yes, but ...  

... what if you want an A0 plot?
Yes, but ...

... what if you don't want to print your map north up?
Cross browser PDF printing with GeoExt

featuring MapFish Print
MapFish Print?

A server side component?
I am an OpenGeo Suite user.

Then you have it already:
http://path/to/geoserver:8080/pdf/info.json
I am a MapFish user.

Then you have it already:
http:/path/to/mapfish/print/info.json
I am a GeoServer user.

Get it here:
None of the above?

Get it here:
http://www.mapfish.org/doc/print/
Preparation on the server

Edit config.yaml to set up your layouts
(not covered here)
Getting Started the Easy Way

GeoExt Extensions
PrintPreview ux

Print Preview window á la GYM
PrintPreview using GeoExt.data.PrintProvider

This example shows how to use GeoExt.data.PrintProvider to talk to the Mapfish print module, which allows printing from OpenLayers maps.

Use the "Print" button from the bottom toolbar of the map to open the print dialog.

Note that this example uses GET requests to communicate with the print servlet (provided by the OpenLayers print module). For production use, the POST method is preferred (URL length in Internet Explorer, and character encoding issues).

See PrintPreview.js for the source code.

Tasmania Water Bodies

Tasmania State Boundaries

GeoExt Printing Demo

Include legend?

Enter comments here.

Print...
SimplePrint ux

Print configuration à la MapFish
SimplePrint Form using GeoExt.data.PrintProvider

This example shows how to use GeoExt.ux.SimplePrint to talk to the Mapfish print module, which also runs inside the GeoServer printing module.

The rectangle and handles on the map can be used to change center, scale and rotation. Dragging one of the handles will change the scale. Dragging the corner handles on their edges will rotate the extent, if supported by the layout. Holding the SHIFT key will constrain rotation to 45° steps.

Note that this example uses GET requests to communicate with the print servlet (provided by the OpenGeo demo server). This saves us a proxy, but has limitations (URL length in Internet Explorer, and character encoding issues). For production use, the POST method is recommended.

See SimplePrint.js for the source code.

<table>
<thead>
<tr>
<th>Title</th>
<th>GeoExt Print Demo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comment</td>
<td>A rotated map of Western Europe</td>
</tr>
<tr>
<td>Layout</td>
<td>A4</td>
</tr>
<tr>
<td>DPI</td>
<td>75</td>
</tr>
<tr>
<td>Scale</td>
<td>1:16,384,000</td>
</tr>
<tr>
<td>Rotation</td>
<td>-30</td>
</tr>
</tbody>
</table>
Introducing the Architecture

#1 UI components
PrintPreview using GeoExt.data.PrintProvider

This example shows how to use GeoExt.data.PrintProvider to talk to the Mapfish print module, which allows you to print maps from your GeoExt application.

Use the "Print" button from the bottom toolbar of the map to open the print dialog.

Note that this example uses GET requests to communicate with the print servlet (provided by the OpenLayers print module) in Internet Explorer, and character encoding issues. For production use, the POST method is preferred.

See PrintPreview.js for the source code.

GeoExt.PrintMapPanel
SimplePrint Form using GeoExt.data.PrintProvider

This example shows how to use GeoExt.ux.SimplePrint to talk to the Mapfish print module, which also runs inside the GeoServer printing module.

The rectangle and handles on the map can be used to change center, scale and rotation. Dragging one of the handles will change the scale. Dragging the corner handles on their edges will rotate the extent, if supported by the layout. Holding the SHIFT key will constrain rotation to 45° steps.

Note that this example uses GET requests to communicate with the print servlet (provided by the OpenGeo demo server). This saves us a proxy, but has limitations (URL length in Internet Explorer, and character encoding issues). For production use, the POST method is recommended.

See SimplePrint.js for the source code.

GeoExt.plugins.PrintExtent
Introducing the Architecture

#2 Form helpers
PrintPreview using GeoExt.data.PrintProvider

This example shows how to use GeoExt.data.PrintProvider to talk to the Mapfish print module, which allows for print preview. Use the "Print" button from the bottom toolbar of the map to open the print dialog.

Note that this example uses GET requests to communicate with the print servlet (provided by the OpenGeoServer's Mapfish print module), which can lead to issues with URL length in Internet Explorer, and character encoding. For production use, the POST method is recommended.

See [PrintPreview.js](https://www.opengeo.org) for the source code.

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**GeoExt.plugins.PrintProviderField**

**GeoExt.plugins.PrintPageField**
SimplePrint Form using GeoExt.data.PrintProvider

This example shows how to use GeoExt.ux.SimplePrint to talk to the Mapfish print module, which also runs inside the GeoServer printing module.

The rectangle and handles on the map can be used to change center, scale and rotation. Dragging one of the handles will change the scale. Dragging the corner handles on their edges will rotate the extent, if supported by the layout. Holding the SHIFT key will constrain rotation to 45° steps.

Note that this example uses GET requests to communicate with the print servlet (provided by the OpenGeo demo server). This saves us a proxy, but has limitations (URL length in Internet Explorer, and character encoding issues). For production use, the POST method is recommended.

See SimplePrint.js for the source code.
PrintPage?

PrintProvider?
Introducing the Architecture

#3 The invisible
GeoExt.data.PrintPage

Describes a PDF page
Multi-page printing is possible
GeoExt.data.PrintProvider

Turns the print module's capabilities into Ext data stores
GeoExt.data.PrintProvider

Holds print pages

Describes the PDF document
GeoExt.data.PrintProvider.encoders

Encodes layers, legends etc. and sends them to the print module
Putting it all together
And what about the final PDF?
GeoExt Printing Demo

Tasmania's water bodies - demonstrating web map printing in GeoExt.

- Tasmania Water Bodies
- Tasmania State Boundaries
More information

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