What can bring MapML to the INSPIRE community

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Current status in INSPIRE

• http://wms.mapama.es/sig/Costas/Riesgo/RiesgoPob_100/wms.aspx?
Embed maps on the web: No obvious
Who Is The Web For?

- The inventor of the Web, Sir Tim Berners-Lee famously said: “The Web is for Everyone”.

- But is publishing a map on the web for everyone?
How We Make Maps in 2018

Developers

OGC®
How can we make maps in the future?

Developers
The aim

- Web mapping today is complicated and requires advanced and specialised skills
  - Developer must know how to program in a complex Web / network environment
  - Many development choices, no obvious best
- Maps4HTML objective: browser will have specialised skills
  - Extend HTML to enable declarative maps
  - Author must know / learn how to use basic HTML only
Why Do We Need Maps for HTML?

• Lower the barriers
  – Make it so that everyone who wants to make a map has the tools to do so: kids
  – Make it so that everyone who needs to make a map has tools that scale to their needs: professionals
Creating bridges by lowering barriers
4 levels of complexity

[Image]

1. Traditional OGC Web services (protocol) on top of HTTP: WMS, WMTS, WFS, WCS...

2. NextGen OGC services based on OpenAPI. Use HTTP to server resources on the web

3. JavaScript API to be able to embedd maps on a web page

4. HTML extension to declare map resources in a document in the same way that you add an image.
4 levels of complexity

1. Manually build JavaScript code that
   - builds request KVP
   - Manually interpret GML (XML)
   - Extract and show the information

2. Automatically
   - create code from the OpenAPI document
   - parse JSON

3. Extract and show the information

4. MapML
   - Add a MapML document into the a HTML <map>
What if datasets were just files to include in HTML?

```html
<map is="web-map" zoom="17" lat="45.398043" lon="-75.70683"
width="700" height="400" controls hidden>

   <layer id="osm" src="https://geogratis.gc.ca/mapml/en/osmtile/osm/"
   label="Open Street Map" checked hidden></layer>

   <area is="map-area"id="marker2" href="https://example.com/marker/
   alt="Marker" coords="265,185" shape="marker">

</map>
```

http://maps4html.github.io/Web-Map-Custom-Element/

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What is inside of a MapML file?

<MapML>
  <head>
    <title>Toporama</title>
    <base href="/api/beta/mapml/en/osmtile/toporama/"/>
  </head>
  <body>
    <extent units="OSMTILE">
      <input name="z" type="zoom" value="18" min="4" max="18"/>
      <input name="w" type="width"/>
      <input name="h" type="height"/>
      <input name="xmin" type="location" units="pcrs" position="top-left" axis="easting" min="-2.003750834E7" max="2.003750834E7"/>
      <input name="ymin" type="location" units="pcrs" position="bottom-left" axis="northing" min="-2.003750834E7" max="2.003750834E7"/>
      <input name="xmax" type="location" units="pcrs" position="top-right" axis="easting" min="-2.003750834E7" max="2.003750834E7"/>
      <input name="ymax" type="location" units="pcrs" position="top-left" axis="northing" min="-2.003750834E7" max="2.003750834E7"/>
      <link rel="image" href="http://wms.ess-ws.nrcan.gc.ca/wms/toporama_en?SERVICE=WMS&REQUEST=GetMap&FORMAT=image/jpeg&TRANSPARENT=FALSE&STYLES=&VERSION=1.3.0&LAYERS=WMS-Toporama&WIDTH={w}&HEIGHT={h}&CRS=EPSG:3857&BBOX={xmin},{ymin},{xmax},{ymax}&amp;mp;m4h=t"/>
    </extent>
  </body>
</MapML>
Natural Resources Canada uses it!

Map Markup Language (MapML) Services
Showing 1 to 33 of 33 entries | Show 100 entries | Filter items

- Canada Base Map - Transportation (CBMT)
- Clean Energy Sources in Canada
- Environment and Climate Change Canada - GDPS DIAG - Dominant precipitation type
- Environment and Climate Change Canada - HRDPS CONTINENTAL - Freezing rain accumulation
- NASA Blue Marble
- Natural Resources Canada - 3D models
Picking on example
Can INSPIRE join the community?

MAPS FOR HTML COMMUNITY GROUP

The Maps in HTML Community Group seeks to establish at least one hypermedia type which can be considered to be consumed by a (new) "map" element for HTML. Follow-on from Bar Camp at #lgd14. The objective will be to define a hypermedia type which can be linked to from a hypothetical (but prototyped in Web Components) "map" or (geo-map for Web Components) element which will provide simple mashup capabilities and user interface.

Note: Community Groups are proposed and run by the community. Although W3C hosts these conversations, the groups do not necessarily represent the views of the W3C Membership or staff.

Tools for this group

- Mailing List
- Wiki
- git (for discussion)
- discurs
- github
- twitter
- rss
- Contact This Group

No Reports Yet Published

Share when logged in, may publish draft and final reports. Please see report requirements.
Maps for HTML Community Group

- W3C CLA Licensing
- discourse.wicg.io/c/web-mapping
- Github: Like, fork us etc.
- OGC Testbed 13 / 14

http://maps4html.org
Maps For HTML Inspiring Vision

Everybody
Publishing
INSPIRE
Datasets
In their
Posts

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