Project no. 018340

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C5.67 Map generation web-services enhanced for publication ready maps

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Dissemination Level		
PU	Public	**X**
PP	Restricted to other programme participants (including the Commission Services)	
RE	Restricted to a group specified by the consortium (including the Commission Services)	
CO	Confidential, only for members of the consortium (including the Commission Services)	

C5.67 Map generation web-services enhanced for publication ready maps

Based on the M5.28 report (Report on Guidelines to produce publication ready maps), identifying the requirements for the service in terms of quality map printing, features for enhancing the MapViewer tool for publication-ready maps have been studied and implemented.

It should be noted that this implementation work is still ongoing, in close coordination with the map services API development and documentation (see C5.68 report).

Also, the MapViewer Tool is currently being converted to use ImageMagick as a background image conversion toolset, rather than the GD library that was in use until now. This was decided upon largely as a result of the M5.28 report requirements, as ImageMagick will provide more flexibility and support for more different formats.

Overview of implemented features from the M5.28 report:

Need for black and white or gray scale maps, not only color maps for paper journals where colored pages are either not allowed or too expensive

Status: implemented, images can be downloaded both in colour and B/W

To cope with black and white or gray-scale maps more easily distinguishable symbols will be needed

Status: the symbols currently available are the OGC-defined geometries (star, circle, square,...), that cover most needs for resizing and clarity - there seems to be no direct need for other symbols.

Files generated for download can be very large, need options to compress them if high quality images are needed

Status: at closer look this is not really relevant: jpeg and other image formats already incorporate the best image-compression algorithms. Perhaps the level of compression (for jpeg, png and the likes) could be made into a parameter.

Many journals request Tiff format, would thus be easier to have the option to have the image of the map directly in Tiff to avoid that the end-user has to do the conversion himself locally

Status: the ImageMagick will offer tiff as a possible format as well - in fact, it was one of the reasons for the conversion to ImageMagick.

Provide maps in a size optimized for common page standards (A5, A4 ….)

Status: a parameter describing image dimensions (through pre-defined settings) can be added, but more exploration is needed as to what exactly the 'optimal size' for A4 really means: does it mean an image covering the whole page (landscape) or half of the page (portrait)...?

Have clear and nice background maps going from whole continent level to the level of a small river basin

Status: the CSIC edit website offers a lot of freely available background maps. The Mapviewer tool incorporates a WMS search function for obtaining others. While more (links to) pre-defined and pre-stored maps would be useful, it is beyond the scope of the current CSIC MapViewer work to compile an extensive library of maps.

Colours

The M5.28 report asked for different colour schemas such as CMYK (Cyan, Magenta, Yellow, Black) and RGB (Red, Green, Blue). With the conversion of the MapViewer tool to ImageMagick as a background image toolset all these schemas will become possible.

File formats

The conversion to ImageMagick will make available a host of different file formats, as asked for (again, this was one of the reasons for the conversion).