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Open source technologies for delivering historical maps online - case studies at the National Library of Scotland

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Abstract

This regular presentation is directed to the third main theme of the conference, using new open- source technologies to do more with less. Over the last four years, the NLS has saved money and improved user access to online historical maps through the implementation of new open source tools. These include:

- a new viewer (a customised version of *Openlayers*) for zooming and panning high-resolution images of maps (eg. <http://maps.nls.uk/scotland/view/?sid=74400733>)
- a *Georeferencer* application allowing collaborative online georeferencing of maps (<http://geo.nls.uk/maps/georeferencer/>)
- over 100 new tiled mosaics of georeferenced series maps created using *MapTiler* (<http://geo.nls.uk/maps/>)
- new clickable indexes to 42,000 series maps using *Geoserver* and *Openlayers* (<http://geo.nls.uk/search/>)

All of these applications were developed by Klokan Technologies, in collaboration with the National Library of Scotland, and all of them are easily extendible to other map libraries. These open source tools also provide an excellent basis for collaboration with other map libraries, sharing technology, experience and advice.

The paper will review the main advantages of these applications, particularly in terms of improved access to historical maps, improved functionality and user experience. It will also indicate how these applications have saved money particularly by moving from (and therefore not paying licensing costs) of proprietary software. It will also discuss some of the practical experiences of developing these tools, and how the necessary technical knowledge is extendible to other new open-source technologies relevant to map libraries.