

Title:	Digimap for Schools - <a href="http://digimapforschools.edina.ac.uk">http://digimapforschools.edina.ac.uk</a>
Developed for:	Joint venture between Ordnance Survey and EDINA
Sector:	Education
Date Completed:	September 2010

## Maps in Schools

*Digimap for Schools*<sup>1</sup> is an online mapping service for teachers and pupils in schools. Established in 2010 and building on the [EDINA Digimap](#) service for higher and further education, *Digimap for Schools* is a collaborative venture between [EDINA](#), [Ordnance Survey](#) and [JISC Collections](#). *Digimap for Schools* replaces the free paper maps previously offered by the OS to all 11 year olds. The service was awarded the GOLD Certificate for the best overall resource in the [Geographical Association's 2011 Publishers' Awards](#). The GA Publishers' Awards aim to recognise material which is likely to make a significant contribution to geography in primary schools, secondary schools or colleges, and to

encourage the creative development of new materials.

*Digimap for Schools* provides easy access to a range of current Ordnance Survey maps from mini-scale, giving a great overview of countries, to OS MasterMap, the most detailed mapping offered by OS. Between these extremes are a range of mapping products including digital versions of Ordnance Survey's famous paper maps, the Landranger and Explorer series, which means there is a map suitable for just about everything. In addition, users can annotate the map with text and a range of standard and free-form shapes and then print out their customised map.



Figure 1 - OS MasterMap data with annotations added shown in Digimap for Schools

## OSGeo Stack

*Digimap for Schools* is built using a range of OSGeo approved open-source software products. All screen maps are stored as flat files which are served by MapServer<sup>2</sup> to populate TileCache<sup>3</sup>. Small scale map tiles down to 1:25 000 were pre-cached to improve speed and larger scale maps are cached the first time they are requested. Prints of MasterMap data use a vector version of the data which is stored in PostGIS<sup>4</sup>. The mapping control on the user interface is handled by OpenLayers<sup>5</sup> which is flexible, easy to customise and results in an intuitive interface for users.

At present, the print files are handled by Cadcorp's Geognosis<sup>6</sup>, a proprietary package which creates excellent cartographic output. All the software described here comply with Open Geospatial Consortium<sup>7</sup> standards which allows developers to plug different packages into the software stack. This interoperability has been the key to delivering a fast and reliable service which is flexible and adaptable.

- 1 - <http://digimapforschools.edina.ac.uk>
- 2 - <http://www.mapserver.org/>
- 3 - <http://tilecache.org/>
- 4 - <http://www.postgis.org/>
- 5 - <http://openlayers.org/>
- 6 - <http://www.cadcorp.com/>
- 7 - <http://www.opengeospatial.org>



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