

TRANSLATION RULES FOR THE DYNAMIC GENERATION OF NEW MEDIA ATLASES

Todd Walker¹
and
William Cartwright²

¹ *Doctoral Research Candidate. email: s8703690@student.rmit.edu.au*

² *Associate Professor. email: william.cartwright@rmit.edu.au*

Department of Geospatial Science

RMIT University

GPO Box 2476V, Melbourne 3001, Australia

fax: + 613 9663 2517

Abstract

The World Wide Web (Web) has the ability to provide information at an instant. Businesses have already taken advantage of the speed with which the Web can deliver information as well as the extent to which it can deliver. The geospatial industry is now also taking advantage of the Web, where there is a growing trend to deliver geospatial information 'online'. In the past, the home, school or office would expect to contain a printed atlas of some description. In some instances, the printed atlas could be 5, 10 or even 20 years old – clearly out of date. The online atlas is seen as the next logical step to providing current geospatial information to the general public. As Internet connections are available in homes, schools, offices and local libraries, everyone can have access to online atlases. The entire atlas would be visible within a matter of seconds, with the most recent information available.

Society is now changing from being 'data poor' to 'data rich'. The Web provides the opportunity to access the multitude of geospatial datasets available through a single user's computer. At present, geospatial datasets reside on many different organisations' systems, and in many different formats. Co-ordinating these resources into one coherent online resource is crucial for efficient and effective delivery of geospatial information to a wider audience. In order to effectively and efficiently deliver geospatial information from many locations via the Web, a set of transformation rules will need to be developed. These rules will ensure that data acquired from any source will be presented in a uniform manner regardless of its origins.

The aim of this poster is to highlight the work being done by the Department of Geospatial Science, RMIT University, Australia, to develop a set of translation rules for the co-ordination and presentation of geospatial information from many discrete locations via the Web. The rules will be tested and evaluated to determine their effectiveness in the transferral of geospatial data from a variety of sources. A prototype Web-based *New Media Atlas of Victoria* will be developed to test and evaluate the effectiveness of the set of transformation rules. This prototype will draw upon datasets from Land Information Group (LIG), a Victorian organisation that contributes to the State's geospatial infrastructure. Individual databases would reside within the existing organisations, thus ensuring data integrity, security and currency. These databases would be 'interrogated'

once a data presentation request had been made by the user (client) and maps plus associated supporting documentation will be generated and transferred to the user's computer via the Internet. The set of transformation rules would be placed on a server, using one of the proprietary software packages and a request for information would be made at the client side using an interface and structure that would share some similarities with the paper version of the product. The transformation rules will prepare the data for presentation and results would then be generated and a Web page dispatched from the server to the client.

This Poster addresses the following topics:

6. National and Regional Atlases

12. Multimedia Cartography and Electronic Maps

15. Mapping on the Internet and the World Wide Web