

# Making the Web pay

BY MATTHEW TOON

In the last year, a sea change has occurred in the GIS industry. Acquisitions and developments in the market have resulted in a plethora of products that provide spatial capabilities over the Internet. But what vendors and Internet evangelists don't tell us is that with any new frontier, there are always obstacles to overcome.

The drive for Internet GIS (IGIS) is based upon the idea of spatial data access through the Web or an intranet. People with no GIS experience will be able to access and analyse spatial data. They probably won't care what GIS they are using and might not even understand the concept.

Organisations will be able to distribute spatial information internally, in a similar way to digital text. They won't need large numbers of expensive GIS packages, and will be able to centrally manage spatial data, security and application distribution. They can also use "thin clients"—cheap network computers linked to a central server which does most of the data processing.

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The potential long-term savings of IGIS have yet to be determined but even by reducing data replication, there is definite scope for savings.

## Work in progress

The basic technology is already in place. By sticking to Web standards, IGIS developers already have widely distributed viewers in the form of Internet Explorer and similar browsers. Current server products range from Internet-enabling add-ons for existing systems to Web development environments. But a method of

providing interactive, dynamic spatial datasets is needed.

We should also not presume that ease of use and customisation is a feature of current IGIS offerings. Server installation is still a highly technical procedure, usually requiring data formatting, web-server integration, security management, database integration and web-page development amongst other things. Users and developers often have to suffer a wealth of poorly explained documents. Even among those who understand spatial technologies, there needs to be a campaign to raise awareness of the potentials and pitfalls of IGIS. Vendors are going to have to bridge the gap between the technology and user-friendliness that currently exists.

## Money matters

IGIS is a step towards wider access to spatial information. This has major implications for vendors and developers who must accommodate these new types of user and modify the pricing

structures of their products. With the high cost of digital data and uncertain legislation regarding the publishing of maps on the Internet, no-one is sure how developers will recover the high costs of data publication. A model for Web-based commerce in spatial information has still to be developed, yet this is the area that will fire the market.

The development and use of Internet and intranet-enabled spatial technology will be the industry's biggest growth area for the foreseeable future. Increased spatial capabilities, ease of management and better integration with server software are set to become hot topics in the next stage of development.

It is easy to snipe at the initial offerings from GIS vendors, but future products will continue to improve. It is up to us to voice our opinions on what we want from them.

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