



A heavenly host can be the devil to find for your web map site



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The time comes in every website's life when the Windows 2000-based active server page code has been finished, the interface has been tested to destruction, the marketing people have branded your site with logos, the designers have turned it magenta and the lawyers have added a 200-line disclaimer to each page. All that's left is to find somewhere to put it.

Finding the right place to host your website can be trying at the best of times. Many who decide to put their spatial information on the web have little idea how to do it, especially if they want a high-traffic site serving data to the public. Numerous options face the would-be Internet map publisher: host it internally within the department, host it internally but in the IT department, host it externally with a general Internet Service Provider (ISP), or host it externally with a specialist spatial ISP.

Small specialist companies or large departments within big organisations may have the wherewithal to host a site themselves. This offers major benefits in terms of access and control. You can get at the site physically when you need to install or upgrade software, add new data or patch the code. Care must be taken not to tweak too much, though, as this may affect the performance or availability of the site. Internal hosting is good for developing sites, allowing users to feed back changes or to comment on implementation details. A prototyping server fits into this role, as it may have a slowish connection to the web, may not always be running or stable, and may not perform as highly as the final site.

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Larger organisations with big fat connections to the Internet, or organisations just wanting to serve data to their intranet, may be able to host the site in their own IT department. This probably provides the best balance between access and security. You will still have sole control of the Internet mapping servers without having to pay thousands in third-party hosting costs. If things go wrong, you have easy access to the site. But even large organisations may not have the external bandwidth or operational set-up to handle a high-volume, always-on website. For that you need to go to a professional ISP.

Professional ISPs are often the best choice for putting map sites on the web. While many sites start small, it takes only one disaster or piece of national advertising to dramatically increase the volume of traffic. Sites that were operating well last week may grind to a halt; bandwidth peaks bring angry emails from customers. The solution is to relocate to an ISP that has the infrastructure to cope with bursts of Internet activity. Even so, users face pitfalls when hosting externally. ISPs vary in cost and ability, from those on whose servers you hire space to those with whom you place a complete server. Few ISPs have much experience with GIS, which means you will usually have to provide your own support even though the site's in London and you're in Derby. Generally, machines are set up at the user's site and then shipped to the server farm; packages such as pcAnywhere or NetSupport allow you to access the server for minor

adjustments. Major data upgrades may require you to travel miles to a freezing basement in Docklands. Depending on your agreement with them, ISPs may maintain hardware or reboot a server but generally won't touch the GIS or database without full training, extra cash and absolution from liability if anything goes wrong.

Such operational nightmares can be mitigated by buying application service provision, getting someone to develop and host a site for you, or hosting your site with a specialist ISP who deals with GIS. These ISPs are few, because of the complexity in setting up the sites and the critical nature of GIS within many organisations, but they are becoming more common. Such ISPs can provide development and management as well as technical experience in GIS. As more people see the need to provide complex GIS systems organisation-wide, these niche players will become more valuable as both consultants and hosts. They can also provide expansion room for high-volume traffic peaks and co-location for critical applications.

Getting hosted can be hard, and you may find out too late that you have made the wrong choice. Careful planning helps, and the best ISPs will provide a range of solutions. If you find a good solution for your site, stick with it and try to build a relationship with whoever is doing the hosting. Then if something does go wrong, correcting it will be easier.

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