Sandpiper Networks' Footprint Takes Aim at Internet Traffic

By Nick WingfieldThe Wall Street Journal Interactive Edition

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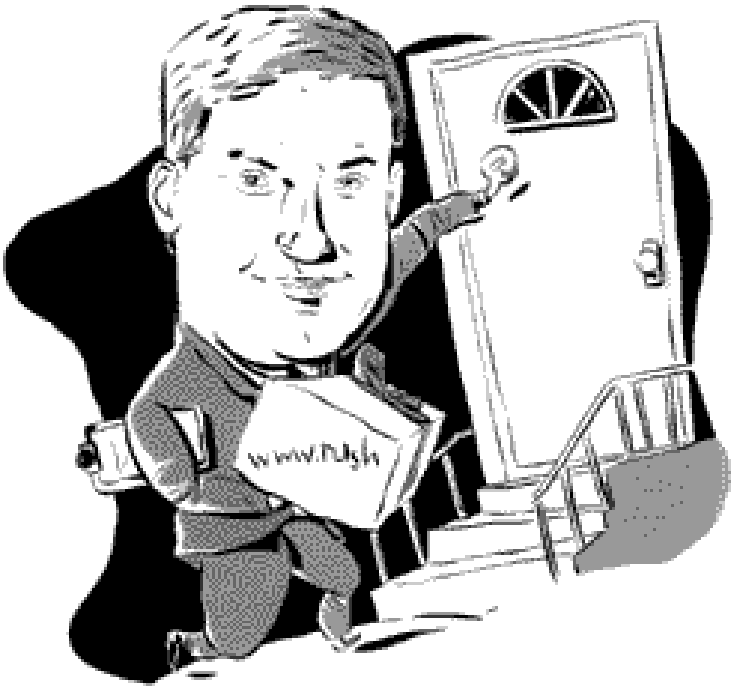
Can a technology company parlay the Starr Report, the Oscars and tax season into a hit product?

Sandpiper Networks Inc. hopes so. For the closely held Westlake Village, Calif., company, big events that send people scurrying online for information are a boon to business because of the resulting Web traffic jams those events can cause.



Leo Spiegel

Sandpiper (www.sandpiper.com) makes a product called Footprint that aims to disentangle Web paralysis before it sets in. Footprint is a computer containing loads of storage capacity and specially designed Web-server software.

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Telephone and Internet-service companies install the Footprint boxes at key points in their networks, and Web publishers then store high-demand content on those servers. That way, when a request comes in for a Web page it can be dished out locally from the Footprint box instead of the system having to ask for the page from a distant Web server computer, which could be overwhelmed by similar requests. Think of it as a shipping service that delivers packages to your front door, instead of making everyone in the neighborhood crowd into a single post office for pickups.

Sandpiper has installed its servers in 20 network centers operated by the likes of America Online Inc., Sprint Corp. and EarthLink Networks Inc. Typically the boxes are placed in strategic locations, such as next to the banks of modems that answer telephone calls from users dialing into the Internet.

When something big happens -- the Dow falls 400 points, say, or a plane crashes -- a Web publisher posts information about the event on Footprint servers instead of on the publisher's regular servers. That way, users can quickly fetch the headlines from a computer near them instead of having their request travel all the way to the publisher's Web site -- along with the requests of millions of other surfers in cyberspace.

The effect of Footprint is something like a "shock absorber" for Web publishers, says Sandpiper Chief Executive Officer Leo Spiegel, who claims the service can boost the speed at which Web pages load by 50% to 200%.

Special events are a good test of Footprint's abilities. The Los Angeles Times, for example, put Independent Counsel Kenneth Starr's report to Congress and photographs of this year's Academy Awards ceremony on Footprint servers to handle the bursts of traffic on its Web site. Intuit Inc., meanwhile, used Footprint to distribute updates to its tax-preparation software during filing season.

Other sites are beginning to use Footprint for everyday purposes: E! Online, an entertainment-news site, relies on Sandpiper to store half of the material on some of its Web pages, including graphics and photos. Jeff Mayzurk, director of technology at E! Online, says Footprint has noticeably improved the download time for its Web pages. "We pride ourselves on our ability to handle big spikes" in traffic, says Mr. Mayzurk.

Publishers like E! Online rent space on the Footprint servers on a subscription basis, paying anywhere from $2,000 to hundreds of thousands of dollars a month, depending on how much network capacity they need.

Footprint is a variation on an older performance-boosting technology called caching. Internet providers like AOL use caching servers to automatically store copies of the most-popular Web pages on their networks. That means a request from an AOL user for a popular page goes not across the Web to that page's server, but to AOL's own server. The result is less network congestion.

But traditional caches have drawbacks. For one, publishers have little or no control over what gets copied into caches. Material copied into caches gets stale, publishers complain. Caching companies say publishers can avoid that by programming their Web pages differently, but many don't.

Rick Juarez, an analyst at BancBoston Robertson Stephens, which has invested in Sandpiper, says caches are still a "dumb instrument for distributing information."

Sandpiper's system, on the other hand, gives publishers control, letting them decide exactly what information on their sites gets placed "closer" to surfers. The system also gives publishers a better handle on how many users are viewing information from their sites, information that's demanded by advertisers and sometimes obscured by caching servers. "With Sandpiper at least I get back reports so I know how many" people came to my site, says Lemont Southworth, technology manager for new media at the Los Angeles Times.

Mr. Spiegel says Sandpiper isn't out to replace caching servers, though. Inktomi Corp., probably the best-known provider of caching software, is an investor in Sandpiper, as is AOL, a big user of Inktomi's caching software. So far, venture capitalists and other investors have sunk a total of $28 million into Sandpiper.

The company has a strong new competitor in Akamai Technologies Inc., a Cambridge, Mass., firm whose name means "clever" in Hawaiian -- and a competitor that has nabbed $35 million in financing. Big-name customers are turning to Akamai, too: Apple Computer Inc. recently signed up after the computer maker's site was walloped by people downloading video trailers for the new "Star Wars" movie. Yahoo! Inc., whose site is the most-visited on the Internet, uses Akamai servers to store the Yahoo corporate logo at the top of its home page.

Akamai boasts that its technology is better than Sandpiper's and that it has more servers deployed around the Internet than its slightly older competitor. But analysts say it is too early to call a winner between the two.

"At this point, I would say it's a dead heat," says Robertson Stephens' Mr. Juarez.