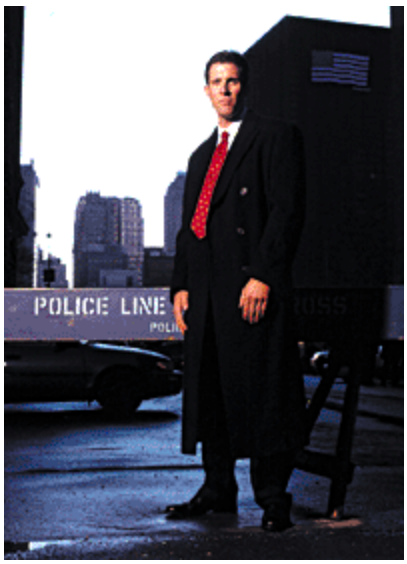
Cover Story

Disaster First Aid

By Rob Carbone, *CRN* Test Center
It's no longer just an afterthought.

Disaster recovery jumped into the high-tech spotlight in the wake of the Sept. 11 terrorist strikes. Many solution providers say that this year they expect a rising number of businesses to turn to them for solutions that protect mission-critical systems and data and keep operations running. Technology purchasing decision-makers cite disaster recovery and business continuity as being among their top five IT priorities, according to a survey last fall by research firm Gartner.



Michael Zepernick, president of Manhattan-based CIS, used Citrix MetaFrame to maintain system access after the Sept. 11 attacks.

With that in mind, the *CRN* Test Center has identified three technologies that can form part of a disaster-recovery solution for SMBs: server appliances, server management and peer-to-peer (P2P).

In the SMB market, the importance of disaster-recovery planning largely fell on deaf ears before Sept. 11, said Michael Zepernick, president of Manhattan-based solution provider Computer Integrated Service (CIS).

"Now everyone is eager to not only store their tape backups off-site, but they also want to know that they can have realtime access to their applications in the event of disaster," Zepernick said.

Though the New York and Washington attacks may fall under the realm of the extraordinary, they made a lot of companies realize that disastrous events are a real possibility,and a real threat. Business interruption can stem from both technical and nontechnical events, including system failures and crashes, component failures, mechanical breakdowns, natural disasters, system/data theft and criminal acts.

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But regardless of the cause of the interruption, timely recovery from a technology-crippling event can mean the difference between business continuity and business extinction. Another Gartner report estimated that two out of five companies that experience a disaster will go out of business within five years.

and P2P technologies can help SMB customers quickly recover from catastrophe.

For large corporations, disaster-recovery planning often involves the setup of a complete, redundant system at an off-site location so that business operations can be switched over to the backup system with little or no downtime in the event of a disruption. However, for solution providers' core SMB customers, that option can be cost-prohibitive.

While the three technologies spotlighted by the Test Center aren't cure-alls in recovering from IT catastrophes, they can provide cost-effective, easily implemented capabilities for backing up and recovering data, keeping core systems operational and allowing business decision-making to continue in a timely manner.

SERVER APPLIANCES

Deploying server appliances has several distinct advantages for SMBs. The integrated style of server appliances,which blend the features of traditional file servers, Internet-access gateways and Web servers into one device,eases replacement in emergencies, and most of the units on the market have comprehensive backup capabilities.

PRODUCT FOCUS

>> NET INTEGRATION'S NET INTEGRATOR MARK I-IDB
>> PRICING: $2,699-$4,299, based on model (Mark I, Mark I-idb, Mark II, MarkII-idb). All include System ER.
>> BEST PRACTICES:
> Store extra copies of all configuration and setup notes off-site.
> Use drive-imaging software to store critical desktop PC hard-drive data and applications on the server appliance.
> Perform regular complete backups of the server appliance to removable media and store off-site.

Another big plus is the ability to relocate the equipment quickly. Server appliances are housed in a single headless unit, which is much easier to relocate than a rack full of equipment often found with other server-based solutions.

A recent Test Center roundup examined several server appliance products, including Net Integration's Net Integrator Mark I-idb, Sun Cobalt's Qube 3, Toshiba's Magnia SG10 and eSoft's InstaRak. The Test Center recommended the Mark I-idb because of its solid technology and Net Integration's focused channel program.

"Conceptually, appliances,because they are most often complete solutions that are easy to set up,look like the easier solutions to manage in the event of a disaster," said Ozzie Papic, president and CEO of Net Integration, Markham, Ontario.

For example, Papic said, one Net Integration customer had all of its servers stolen, but because of the Mark I-idb's SystemER function, the client was able to use its last backup tape and be up and running fully within one day. SystemER, using complete system backup tapes, allows a company to recover from a major system fault in two minutes, according to Net Integration.

"To our knowledge, just about all of the server appliances on the market do not come with a disaster-recovery aspect built in. And that is what we wanted to have in our product," Papic said.

Net Integration's channel partners are mainly systems integrators that offer disaster-recovery services, he said. "That our product, which is typically aimed at small and midsize businesses, has the added disaster-recovery functionality is a bonus to our partners," he added.

Though server appliances may help a company recover critical data and get up and running again, one solution provider noted that the devices aren't a one-stop disaster-recovery solution for SMBs. "Server appliances will provide data and processing recovery, but the disaster-recovery solution must go farther," said Chris Furey, CEO of Savvy Networks, a Web hosting and co-location service provider based in Tarrytown, N.Y.

"Server appliances have been built as purpose-specific devices that are very helpful when it comes to setting up a low-cost way to access data," Furey said. "But they do not provide the terminal services necessary that you would find when using Citrix."

SERVER MANAGEMENT

When a disaster strikes, system access typically is one of the first things to go. That's where server management technology can provide some IT first aid. Being geographically independent, Web-based server management technology,when properly implemented,allows workers to use IT assets from anywhere there's an Internet connection, including from home or temporary offices.

PRODUCT FOCUS

>> CITRIX METAFRAME FOR WINDOWS XP (ALSO AVAILABLE FOR UNIX)

>> PRICING: MetaFrame XPs (1-5 servers), $290 per user (annual subscription); MetaFrame XPs (6-50 servers), $345 per user (annual subscription)

>> BEST PRACTICES:

> Create and test connectivity scenerios from remote and alternate locations with broadband and dial-up cnnections.

> Validate ASP vendor's disaster-recovery planning.

> Back up critical data and apps to removable storage. Create, test plans for redeploying to non-ASP infrastructure.

To that end, Citrix's MetaFrame XP server and application management software (also available for Unix), when used with a SAN, can lend a hand in disaster recovery. MetaFrame enables a company to switch seamlessly from a main server to a redundant server and allows employees to securely access server-based applications and data via the Web.

MetaFrame also can create ASP hosting opportunities. Solution providers can offer to replicate or host client applications as part of an overall business-continuity plan. Although hosted solutions often involve greater up-front costs, return on investment can be demonstrated by reduced desktop costs and the elimination of many of the server components found in traditional network solutions. Solution providers will need to sell such technologies based on guaranteed uptime and fixed costs.

Disaster-recovery planning, in fact, is a topic that Citrix has embraced. The Fort Lauderdale, Fla.-based company recently produced an internal white paper on business-continuity planning with storage vendor EMC and actually put the solution in the white paper into practice.

"In the summer, prior to hurricane season, we tested our own business-continuity plans," said Bob Kruger, senior vice president and CTO at Citrix. "Our employees were not aware that at various times during the test they were working via a secure gateway on our backup server located in Draper, Utah."

Yet Zepernick's CIS employed Meta-Frame in a real disaster. Located just a few blocks from the World Trade Center site, the solution provider didn't sustain structural damage to its offices but lost its telephony, T1 service and electrical power for one month after the Sept. 11 terrorist attacks, Zepernick said.

"Using realtime backup to both our New York office and our New Jersey data storage facility, we were able to use Citrix's product functionality to cut over any of our employees who were able to access the Internet from home," he said.

Prior to Sept. 11, CIS was working with some clients that had been hit by the Nimda computer virus. The solution provider was able to get back online on Sept. 12 and resume servicing those customers.

The ability to return to action in one day proved the viability of CIS' disaster-recovery plan and demonstrated to customers its prowess in that area, Zepernick said. CIS began as a systems integrator of LANs, WANs and VPNs and evolved into disaster-recovery planning, and the company's New Jersey data storage facility,originally for ASP services,now accommodates disaster-recovery services, he said.

When employing a server management solution in disaster recovery, solution providers should pay careful attention to its fault-redundant capabilities, since a disaster at the data center can be just as damaging as a failure in a locally based solution, the Test Center finds. Duplication capabilities at a remote data center often provide the best-case scenario when dealing with a location-based disaster.

Customers also need to be informed that full responsibility for safeguarding their data can't fall on just the solution provider, Zepernick noted. "We remind our customers that it is their responsibility to ensure their data integrity and what that entails," he said.

What's more, the "fear sell" shouldn't form the basis of disaster-recovery and business-continuity solution sales pitches, Citrix's Kruger said. "Solution providers who are not disaster-recovery specialists but want to offer it as a service should try not to come across like an insurance salesman," he said. "The solution providers should be looking to explain both the long-term value [of the solution] as well as its value on a daily basis."

PEER-TO-PEER (P2P)

While data protection remains a linchpin of any disaster-recovery scheme, a common obstacle that companies face in rebounding from a catastrophe is enabling staff at remote locations to interact, exchange important information and make critical business decisions in a timely manner. Enter P2P technology.

PRODUCT FOCUS

>> GROOVE NETWORKS CLIENT SOFTWARE AND HOSTING SERVICES
>> PRICING: $49 per user (for software and hosting)
>> BEST PRACTICES:
> Install critical appliactions on multiple systems and locations
> Use file synchronization software (e.g. PerrSoft's PeerSync) to replicate crictical data across several systems.
> Create a central storage point for all data and back up to

P2P software allows individuals to collaborate,regardless of location,if a disaster renders a company's office uninhabitable and employees aren't within convenient reach of one another. For example, a common situation among SMBs is a combination of dispersed home offices linked to a central office.

One effective P2P solution comes from Groove Networks, Beverly, Mass., founded by Lotus Notes creator Ray Ozzie. Groove's offering, which consists of client software and hosted services, enables employees at dispersed locations to connect in a collaborative environment and interact, share information and make business decisions,without the presence of a server or an IT organization.

"We position our product so that solution providers can use their expertise in certain vertical markets to add customization that will meet the specific needs of their clients," said Andrew Mahon, director of product marketing at Groove. "We have focused on the solution provider model to take advantage of their knowledge."

Philadelphia-based Alliance Consulting, in fact, gained firsthand knowledge of P2P's use in a disaster. Groove's technology helped the solution provider quickly recover

removable media stored off-site.

from the loss of its New York office on Sept. 11 and helped employees regain their bearings to continue doing business, said John Wollman, senior vice president of solutions marketing at Alliance.

"Using Groove, we were able to quickly make contact with our New York employees so that plans could be put into action to track down customers who were affected [by the terrorist attacks] as well as determining the whereabouts of some of our employees," Wollman said.

Echoing CIS' Zepernick, Wollman said disaster-recovery planning was a non-issue for many of Alliance's clients before Sept. 11, but now the solution provider has a number of disaster-recovery proposals out for review and approval.

"We have used Groove internally and with clients before Sept. 11 for everyday collaborative work," Wollman said. "Groove fills a void in disaster recovery that allows [customers] to focus on the decision-making process and [the product] is less about data and applications."

In implementing P2P solutions with disaster-recovery elements, strict control of data is needed, the Test Center notes. Data should be replicated among several users leveraging a P2P service, and controls must be in place to validate the freshness of the data. Help can be found in synchronization software products such as PeerSoft's PeerSync, which replicates data across separate directories.

P2P also offers one of the least-expensive ways to protect data by geographic separation. But careful management and planning are required to take full advantage of a dispersed data system.

And when employing a P2P service, solution providers should validate that the service provider has its own capabilities to deal with disasters. After all, if the P2P service fails, so does the client's disaster-recovery solution.

FRANK J. OHLHORST contributed to this story.