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# Compliance Control

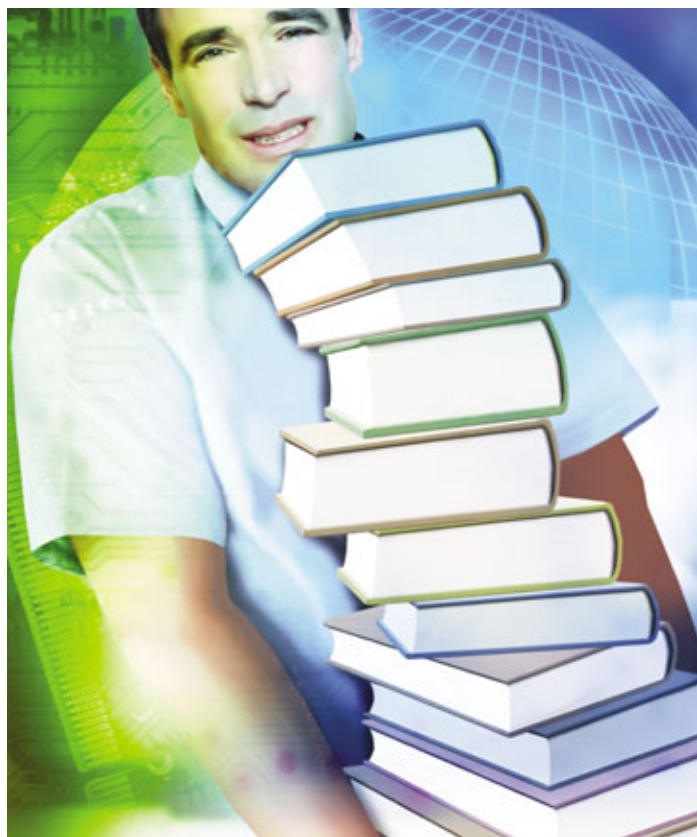
## How Regulations Are Changing The Enterprise IT Landscape

by Christian Perry

ALTHOUGH ROLLING EYES tend to greet any standard mention of compliance, there's no denying the topic is a massive concern for companies of all sizes. But while those same organizations struggle to fall in line with the seemingly endless flow of regulations, others are brainstorming methods to take advantage of them.

Whether you're talking Sarbanes-Oxley, HIPAA, FISMA, Gramm-Leach-Bliley, or other regulations, compliance spins a complex web for companies. Securing enterprise perimeters to protect from attacks is one thing, but doing that and ensuring that company data and procedures are compliant is another, far more challenging matter.

Jason Bloomberg, a senior analyst with ZapThink, compares the process of staying in compliance with speeding on the highway but speeding less than the car in the other lane. "[Companies] figure that there's no way they can stay



fully in compliance, so they just want to be more compliant than the other guys so that whoever the regulatory body is will go after the other guy," Bloomberg says. "Of course, that's really dangerous—more dangerous than speeding, in a way."

### Involve IT

Handling compliance-related issues often requires complicated processes and procedures, though an increasing horde of solutions from software and service vendors gives companies a helping hand. Still, it's a difficult process integrating compliance into enterprise strategy, particularly when employees struggle to understand that compliance should be a regular part of business operations and not a separate procedure.

In a survey sponsored last year by the Security Compliance Council, three out of four organizations said they must comply with two or more regulations, while almost half must comply with three or more regulations. Meanwhile, organizations are spending an average of 34% of their IT resources on procedures designed to help the companies comply with regulations.

"One of the key challenges that companies face is implementing the appropriate governance," Bloomberg says. "Governance is basically coming up with an approach to creating and

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# The Eyes Have It

## As Iris Recognition Matures, SMEs May Be Drawn To Biometric Controls

by Elizabeth Millard

WHEN FACED WITH iris or retina scans, the majority of people think of early spy or science fiction movies, with a character looking into a sweeping red light that leaves him blinking and uncomfortable. But the reality is that eye-based recognition has come a long way since the early days and could become more popular than even fingerprint technology.

An important distinction for this type of biometric is between iris and retina recognition. Although people tend to lump the two together—they

are, after all, both located in the same area—the two are distinct from one another in what they measure and especially in how intrusive they can be for those being scanned.

Iris recognition reads the patterns of, naturally, the iris, which is the colored part of the eye that has enough unique attributes to distinguish one person from another. The retina is in the back of the eye, where the blood vessels come together, and also has enough unique characteristics to be used for identification.

Both forms of recognition are highly accurate in terms

of access control, especially if both eyes are used. Frank Fitzsimmons, president and CEO of iris recognition firm Iridian Technologies, notes that the chances of being mistaken for someone else with a single eye being scanned are about one in a million. But if both eyes are scanned, the chance for error drops to one in a trillion.

### Clear-Eyed Winner

Although both iris and retina recognition have been used for access control, the less intrusive iris systems soon began to trump the retina scans.

Digital camera readers take a photo of the iris and compare it against a database, which allow the readers to be at least 18 inches away from the person being scanned. Retina scanners, on the other hand, tend to make people uncomfortable because of the light

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**Both iris and retina recognition are highly accurate in terms of access control, especially if both eyes are used.**

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As implementations yield better results and costs drop, iris recognition could be the biometric of choice for schools, data centers, and companies.

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Many enterprises either fail to create plans for disaster recovery and business continuity or create plans that are inadequate or quickly become outdated.

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■ The MT3 series of vertical 60A PDU from **Aphel** delivers power ranging between 5,000 and 10,000 watts. ■ **Aventail** introduced the ST2 SSL VPN for controlling remote access to a network and supporting NAC initiatives. ■ **BMC Software** introduced Data Center Optimization, which prevents data center sprawl. ■ **ContentWatch** introduced two new products to its ContentProtect Professional Suite. ■ **Digi International's** new Digi Passport competes with traditional KVM over IP devices. ■ **Para Systems** released four new additions to the Minute-man line of UPS power distribution products. ■ **SurfControl** announced its SurfControl Enterprise Threat Shield 3.51 with features to prevent information leakage via USB. ■ **Watchfire's** AppScan and AppScan Developer Edition help businesses monitor the security of online applications. ■ **Websense** and **CP Secure** announced the CP Secure Content Security Gateway appliance and Websense Web Security Suite package.

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- 200 - 499
- 500 - 999
- 1,000+

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- Monthly
- Quarterly
- Annually
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Upcoming IT Events

- AUGUST -

National Institute of Governmental Purchasing  
August 5-9  
Tampa, Fla.  
www.nigp.org/Events/Forum.htm

Search Engine Strategies 2006  
August 7-10  
San Jose, Calif.  
www.jupiterevents.com

SHARE

August 13-18  
Baltimore, Md.  
www.share.org

Business Intelligence & Data Warehousing Conference  
August 15-17  
San Francisco, Calif.  
www.sharedinsights.com

TDWI World Conference-Summer 2006  
August 20-25  
San Diego, Calif.  
www.tdwi.org

Business & Technology Solutions Show  
August 22-23  
Rosemont, Ill.  
www.btshow.org

- SEPTEMBER -

Data Center World  
September 10-13  
Orlando, Fla.  
www.datacenterworld.com

Visit Processor at Booth 512

HP Technology Forum 2006  
September 17-21  
Houston, Texas  
www.hptechnologyforum.com

COMMON Fall 2006 Conference  
September 17-21  
Miami Beach, Fla.  
www.common.org/conferences/2006/fall/index.html

Interop

September 18-22  
New York, N.Y.  
www.interop.com/newyork

Visit Processor at Booth 568

IT Service Management Forum Conference & Expo  
September 18-22  
Salt Lake City, Utah  
www.jupiterevents.com/itsmf/fall06

Business Rules Symposium Series  
September 19-20  
Washington, D.C.  
www.brainstorm-group.com

Enterprise Architecture Conference Series

September 19-20  
Washington, D.C.  
www.brainstorm-group.com

Government Technology Conference East 2006

September 25-28  
Albany, N.Y.  
www.govtech.net/gtc/index.php/GTCEast2006

Intel Developer Forum

September 26-28  
San Francisco, Calif.  
www.intel.com/idf

- OCTOBER -

IT Expo

October 3-4  
Anchorage, Alaska  
www.sourdough.net

Gartner Symposium/ITxpo

October 8-13  
Orlando, Fla.  
www.gartner.com

Internet Telephony Conference & Expo West

October 10-13  
San Diego, Calif.  
www.tmcnet.com/voip/conference

ASCDI Fall

October 18-21  
Toronto, Canada  
www.ascdi.com

MarketPlace

NEWS



Microsoft To Sue Resellers

IN MAY, THE BUSINESS Software Alliance said that of the software sold in the United States, 21% is pirated. Microsoft is attempting to fight that software piracy by filing lawsuits against 26 companies in seven states, including Colorado, Georgia, Illinois, New Jersey, New York, Ohio, and South Carolina. The software giant claims that the companies either sold computers containing pirated software or sold the pirated software itself. Microsoft used a number of methods to obtain evidence for the cases, including secret shoppers and complaints via Microsoft's antipiracy hotline.

AMD Buys ATI

ADVANCED MICRO DEVICES announced plans to buy graphics chipmaker ATI Technologies for \$4.2 billion in cash and 57 million shares of AMD stock. The deal is worth \$5.4 billion. According to reports, AMD will use a combination of cash and new debt to fund the cash portion of the acquisition deal. ATI shareholders and U.S. and Canadian regulators still need to approve the deal before its completion.

Microsoft Plans Financial Restructuring

INSTEAD OF THE seven categories Microsoft had previously used for its financial reporting, the company announced it will condense them to five operating sectors to gauge its financial performance. Starting in fiscal year 2007, the new categories will be: Client, Microsoft Business Division, Microsoft Entertainment and Devices Division, Online Services Group, and Server and Tools. Microsoft had previously created three operating divisions to enhance its agility in future growth management, and this financial restructuring plan will further align the company around those divisions. Microsoft also announced plans to buy back up to \$40 billion worth of its stock in an effort to reaffirm the company's confidence in its long-term future, according to CFO Chris Liddell.

Google Remains Strong

GOOGLE CONTINUES to be successful at its goal of expanding its advertising business and reported second-quarter revenue of \$2.46 billion, up 77% from a year ago, says CEO Eric Schmidt. The company earned \$721.1 million, about \$2.33 a share, during the quarter, compared to \$342.8 million last year. During the second quarter, Google hired 1,152 new employees and spent \$699 million on capital projects such as real estate purchases. In a conference call, Google executives talked about their initiatives for the coming year, including graphical and video advertisement services along with a radio advertising system related to its acquisition of DMark Broadcasting.

Intel Profit Drops; Announces Reorg

AFTER ANNOUNCING profits that were below analyst expectations, Intel says it will lay off 1,000 managers and plans to continue its reorganization analysis through the end of this year. In addition, Sean Maloney will become the sole leader of Intel's sales and marketing,

replacing co-managers Anand Chandrasekher and Eric Kim, who have been moved to other positions. Net income for Intel's second quarter was \$885 million, a more than 50% drop from the \$2.04 billion it posted a year ago. Intel expects third-quarter sales to be as low as \$8.3 billion, well below the expected \$9.03 billion.

China Plans 3G Meeting

CHINA MAY BE READY to issue 3G licenses after the country's leading telecommunications officials meet early next month to discuss standards for 3G telephony and mobile television. China already has its own 3G standard, TD-SCDMA (Time Division-Synchronous Code Division Multiple Access), that officials fear may prevent widespread use of 3G, as few manufacturers support the standard. The country hopes to have 3G ready to go for the August 2008 Olympic Games in Beijing.

Microsoft Buys Winternals, Forms Alliance

MICROSOFT ANNOUNCED it will acquire protection and recovery tools developer Winternals Software. As part of the deal, Mark Russinovich, co-founder of Winternals, will join Microsoft's Platforms and Services group as a technical fellow, and Bryce Cogswell, Winternals' second co-founder, will become a software architect at Microsoft's Core Operating Systems division. Also, Microsoft and Nortel Networks have formed a strategic partnership and entered into a four-year alliance. The companies will work together to create software that integrates Microsoft's communications software with Nortel Internet telephony hardware and software as a unified communications solution.

Yahoo's Revenue Takes A Dip

YAHOO!'S SHARES dropped last week to their lowest in almost two years in after-hours trading. The company reported weak revenue from Internet advertising in its second quarter and another delay to its Project Panama. Project Panama is an effort to match the ad-selection technology utilized by Google, which would increase Yahoo!'s search revenue. In Q2, Yahoo! earned \$164 million.

Dell Projects Q2 Revenue To Fall Short

DELL ANNOUNCED THAT its second quarter revenue and earnings will fall short of projections.

The company blamed the shortfall on "aggressive pricing" in a slow market. Earnings are expected to come in at 21 to 23 cents per share with revenue of approximately \$14 billion. Reuters had polled analysts, however, that had projected an average of 32 cents per share with revenue of \$14.2 billion.

IBM Reports Q2 Revenue

FOR THE SECOND QUARTER ended June 30, IBM saw net income increase from last year's \$1.83 billion, or \$1.12 a share, to \$2.02 billion, or \$1.30 a share. IBM's revenue for the quarter fell 1.7% from \$22.3 billion last year, which included the \$557 million IBM received in May 2005 from Lenovo Group for selling its PC business, to \$21.9 billion this year. Specifically, software revenue rose 5% over last year, up to \$4.2 billion, and revenue from hardware for the Systems and Technology Group fell to \$5.1 billion, down 7% from last year.

Click Fraud On The Rise

TWO NEW REPORTS indicate that the amount of click fraud continues to increase, despite efforts by search companies Google, Yahoo!, and others to limit the problem. A Click Forensics study says 14.1% of clicks during the second quarter of this year were fraudulent, compared to 13.7% during Q1. The click fraud rate at Google and Yahoo! was nearly 12.8%, compared to 12.1% in the first quarter. Research firm Outsell says the click fraud rate is slightly higher, at 14.6%, costing advertisers more than \$800 million. Because of this, Outsell says, 27% of advertisers have slowed pay-per-click advertising and 16% have stopped using that form altogether.

Feds Want Faster Data Breach Notification

CHAIRMAN OF THE House Committee on Government Reform Rep. Tom Davis filed legislation to amend the Federal Information Security Management Act by requiring companies to report data breaches faster than they currently do. The White House OMB (Office of Management and Budget) would set the standards and procedures for incidents of data breaches that involve personal information. Earlier this month, the OMB changed the requirements so agencies must report any data breach to the Department of Homeland Security within one hour of the discovery.

WATCH THE STOCKS

This information provides a quick glimpse of current and historical stock prices and trends for 16 major companies in the technology market.

Company	Symbol	Year Ago	July 17 \$	July 24 \$	% change from previous week
Avaya	AV	\$9.51	\$10.58	\$10.54	▼ 0.38%
BEA Systems	BEAS	\$8.87	\$11.38	\$11.89	▲ 4.48%
Computer Associates	CA	\$29.37	\$19.10	\$19.92	▲ 4.29%
Cisco Systems	CSCO	\$20.12	\$17.97	\$17.95	▼ 0.11%
Dell	DELL	\$41.54	\$21.57	\$20.75	▼ 3.8%
Electronic Data Systems	EDS	\$19.70	\$22.60	\$22.83	▲ 1.02%
Google	GOOG	\$312	\$407.89	\$390.90	▼ 4.17%
HP	HPQ	\$24.73	\$31.20	\$31.07	▼ 0.42%
IBM	IBM	\$84.60	\$73.70	\$75.99	▲ 3.11%
Intel	INTC	\$27.44	\$17.84	\$17.48	▼ 2.02%
McAfee	MFE	\$29.69	\$23	\$23.37	▲ 1.61%
Microsoft	MSFT	\$26.19	\$22.48	\$24	▲ 6.76%
Oracle	ORCL	\$14.03	\$14.42	\$14.98	▲ 3.88%
Red Hat Software	RHAT	\$15.78	\$23.27	\$24.44	▲ 5.03%
Sun Microsystems	SUNW	\$3.81	\$3.88	\$4.02	▲ 3.61%
Symantec	SYMC	\$24.34	\$15.22	\$15.60	▲ 2.5%

NOTE: This information is meant for reference only and should not be used as a basis for buy/sell decisions.

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# Access Control Devices

## Be Careful Whom You Let In

by Sandra Kay Miller

**ACCESS CONTROL:** Today, it's as much about keeping bad guys out as it is about letting the right people in. Organizations are punching more and more holes in their walls to enable transactions; the boundary is getting much more porous. Network administrators want to become proactive to enable legitimate transactions across the net-

cess to what, to ensure people only have access to what they should based on their job function, and that access is disabled when it is no longer required.

Rob Ciampa, vice president of marketing at Trusted Network Technologies, views the access control market as entering a significant growth phase. "It represents a fundamental shift in how we do IT. Over the next three to five years, it will be a shift away from IT-centric representation of business objects to identity-based representation of business objects."

Robert Grapes, senior product manager for Enterprise Solutions at Cloakware, believes that access control technologies are gathering momentum as small, private, pure-play companies are being snapped up by the major players.

### Decisions & Details

Within the enterprise there are numerous facets where access control can be implemented—users, roles, applications, Web servers, wired and wireless network access, resources, etc. Even Gartner sees the market for access control solutions as "crowded, with many vendors providing point products." Sally Sheward, TriCipher's vice president of strategy and business development, points out that it's



### SNAPSHOT

#### BlueCat Networks Adonis 1000

Starts at \$9,995

DNS and DHCP bundled onto an enterprise-class appliance for centralized administration and enterprise-wide management of IP addresses, configurations, and host names

[www.Processor.com/BlueCat](http://www.Processor.com/BlueCat)

work instead of focusing solely on nefarious activities.

"My world is changing," says the IT director for a large financial services company. "Historically, my job has been to keep everyone out, but over the last five years we've experienced a rise in business partners as well as different types of access requirements. I spend my life punching holes in my perimeter because that's how my business runs now," he says.

Evolving business needs are taxing traditional access control devices, such as firewalls, because administrators are pushing them to meet the demands for specific individual user-based policies. Thus, firewalls themselves have become overly complex and difficult to maintain, which has increased the risk profile and made auditing next to impossible.

The reality for medium-sized to large organizations is there needs to be a cohesive and automated process for access control. Given that many IT controls today are also being driven by regulation, it's critical to know who has ac-



### SNAPSHOT

#### Infoblox Network Identity Appliance

Starts at \$9,995

Capable of delivering 300,000 DNS records and 10,000 networks; serves more than 30,000 DNS and 100 DHCP requests per second

[www.Processor.com/NIA](http://www.Processor.com/NIA)

not practical to install and maintain multiple authentication systems.

Ultimately, the decision comes down to where in your organization you need the most control. Additionally, organizations are



### SNAPSHOT

#### Trusted Network Technologies Identity

Tiered pricing: \$15,000 to \$60,000

Both a software and appliance solution providing control by establishing a pervasive identity for every user, group, computer, server, and application

[www.Processor.com/Identity](http://www.Processor.com/Identity)

moving toward providing secure access not only on a technical level but also on a business level.

This shift is occurring due to the fact that as the world moves into an integrated electronic environment, meaning businesses are online and increasingly interactive, executives are often held responsible for technical decisions that will ultimately impact their products, services, customers, and every stakeholder.

Here are some of the areas in which organizations are installing access control devices in an effort to gain more control over their enterprise.

### DNS/DHCP

At the very heart of network access is the address allocation. By gaining control over the fundamental address allocation of resources, organizations can specify granular access policies and controls to all touch points on their network.

The Adonis 1000 from BlueCat Networks amalgamates DNS and DHCP services onto a 1U, rack-mountable, high-availability, hardened appliance. With the centralized administration, administrators no longer have to stay on top of individual threats associated with the operating system, BIND, and DHCP.

A platform-agnostic Java-based management console offers rapid deployment regardless of your organization's infrastructure. Automatic data population helps network administrators save time and cuts down on errors. For existing DNS/DHCP installations, Adonis can import old BIND, DHCP configuration, and Windows 2000 DHCP dump files through easy-to-use wizards.

Using existing technologies, Infoblox repurposes DNS, DHCP, RADIUS, and IP Address Management into a strong identity-based access control methodology, providing robust access control on network and application fronts.

There are two models covering small to midsized enterprises and larger enterprises. The Infoblox 1000 supports up to 20,000 DNS and 70 DHCP leases per second, and the 1200 model scales to 30,000 DNS and 100 DHCP leases per second.

### Identity

The I-Gateway is the hardened, in-line appliance from Trusted

Network Technologies based on its proprietary IDOS (Identity Operating System), which creates a permanent and unalterable identity for all users, groups, computers, servers, and applications by embedding a unique identifier within each session through data packet modification using an Identity Driver. The system is administrated via a Web-based application, I-Manager, and offers fast and easy creation of policies and reports.

Vernier offers nine EdgeWall 7000 series models to fit a variety of performance requirements. Deployed on the front lines ahead of switches and wireless access points, the EdgeWall delivers wire-speed, dynamic, granular access control based on vulnerability assessment and identity to secure data and applications from unsecured endpoints.

Centralized administration and management is through a Web-based console. Policies are enforced in real-time to verify only authorized users with compliant endpoint devices can access resources. For endpoint compliance, Vernier checks security policies, antivirus software and signatures, patches, hot fixes, personal firewall settings, and third-party application requirements. Noncompliant users and endpoints are quarantined, given limited access, or denied entirely based upon policies. EdgeWall supports all third-party



### SNAPSHOT

#### Vernier Networks EdgeWall 7000 Series

Starts at \$9,000

Enforces identity and endpoint security through the authentication, validation, and authorization of endpoints and provides quarantine and remediation for noncompliant endpoints

[www.Processor.com/EdgeWall](http://www.Processor.com/EdgeWall)

switching and routing devices, as well as most VPNs.

### Alternative Angles

Cloakware targets hard coded passwords, often referred to as "headless accounts," which are routinely overlooked within an organization's security schema. These accounts reside in the data center and are used by applications to connect to the back end of infrastructure such as databases, ftp, and Web servers.

"What we've found through a long line of conversations with federal agencies [and] healthcare and financial organizations is hard-coded passwords compose about 90% of the authentication process in the data center," says Grapes.

To combat this problem, Cloakware's Server Password Manager Express, aka CSPM Express, offers

centralized, secure application credential storage and automated retrieval through strong authentication. Only authorized applications and servers can submit requests for passwords and application IDs.

### SNAPSHOT

#### Cloakware Server Password Manager Express

An appliance-based solution providing secure, automatic, and regular update and retrieval of application passwords

[www.Processor.com/Cloakware3](http://www.Processor.com/Cloakware3)

Designed for organizations that have over 200 servers to manage, the appliance-based solution supports multiple platforms (Microsoft, AIX, Solaris, Linux) and is managed via a Java-based administration console. Policies and password changes can be globally



### SNAPSHOT

#### TriCipher Armored Credential System Authentication Gateway

Starts at \$40,000

An appliance for automatically managing the authentication process for Web-based applications

[www.Processor.com/TACS](http://www.Processor.com/TACS)

applied throughout the network from a centralized location.

TriCipher takes a risk-based, ladder approach to access control with TACS (TriCipher Armored Credential System). Using multiple credential methodologies (clientless, device-based, and token), TACS doles out access based upon the level of risk associated with that particular account or user. For example, a user checking an online bank balance may only need a password, while transactions involving large sums of money require multiple authentication factors to complete the transfer.

The TACS Authentication Gateway delegates authentication from Web applications. The appliance ships with a preinstalled Web server fully integrated with TACS APIs and can easily hook into any SAML-aware application as well as passive and secondary authentication technologies.

Regardless of the technology you choose for access control, you need to start with a good understanding of who needs access to what. Determine the access requirements of your organization and implement the technologies that will allow access securely and efficiently. An access control product can help automate processes and provide oversight and assurance for policy enforcement. ■

## Buying Tips

For organizations in the market for an access control device, Trusted Network Technologies' Robert Ciampa provides the following checklist of key items to consider.

- **Current identity organization.** Understand how your enterprise organizes its identities, that is, Active Directory, LDAP, etc.
- **Security and network infrastructure.** Access control is a complement to firewalls, IDS, etc., not a replacement. The solution you choose should work with existing security solutions.
- **Applications.** Access control solutions can be leveraged with powerful business systems such as ERP and CRM; make sure they will work together.
- **ROI.** Make sure there is a valid business case for purchasing an access control device and its value will exceed the purchase, installation, and management costs.
- **Usability.** Choose a solution that tracks to business cases, such as regulatory compliance, instead of one based solely upon technology.

To see *Processor Showcase* advertisements for products in this category, look in the Showcase Index on page 5 and find the Access Control ads under Communications/Security.

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# Compliance: Do I Need To Worry?

**Experts Say Don't Fret About It, But Don't Ignore It, Either**

by Elizabeth Millard

CALL IT A GOOD NEWS and bad news scenario: Likely, a small to mid-sized enterprise won't have to worry much about compliance right now, but that doesn't mean it can relax and let the bigger companies fret about it or that compliance won't affect it within a few years.

Compliance, the buzzword du jour in technology and financial circles, is shorthand for adhering to regulations such as Sarbanes-Oxley (also called Sarbox) and HIPAA, which have been put into place to ensure that publicly traded companies are employing adequate financial and administrative controls.

Most SMEs are exempt from following the regulations because most aren't public and don't deal with healthcare or financial issues, but they should be aware of how customers and vendors are affected by the laws. Also, Sarbox in particular is being rolled out in a number of stages and could include mandates for SMEs in the future. Having some savvy now about what's required—even if the company doesn't need to implement changes—could protect a business in the long run.

**Varying Opinions**

Like many issues affecting SMEs, the importance of com-

“Compliance is a hot topic, but that doesn't mean that SMEs have to kill themselves trying to follow regulations that don't apply to them,” says Larry Bowden, vice president of IBM Workplace Software Solutions, a division of the company that offers hosted compliance services. “Mainly, the issue has brought a lot of money for consultants, but there isn't a big boom in compliance-related purchasing by smaller companies.”

Another reason that SMEs can feel comforted rather than anxious is that the Securities and Exchange Commission has begun to look at the burden to small companies when it comes to compliance. Many that have to follow the laws, such as financial firms, have been struggling with the costs of putting multiple systems in place. In response, the SEC noted in April that it would be revising the audit requirements for small companies, eliminating the need to hire external auditors to certify internal accounting controls.

New regulations may crop up, but they probably won't appear

least another year after the update is passed.

“The SEC is really looking at how to change regulations to be better to SMEs in the future, so

messaging is recorded, or how vendor databases are accessed.

Especially tricky is if the client or vendor is smaller, which might limit its resources in terms of



there's no need to start scurrying yet,” he says. “There will be time after the SEC's decisions to put changes in place.”

**Stronger Focus**

For some SMEs, compliance will play a larger part in their long-term plans. Those companies that are contemplating going public, for example, should definitely have not only accounting and audit procedures in place but also data storage processes, IT security measures, risk analysis reporting, demonstrated improved efficiency through security planning, and appropriate hardware and software.

Companies that don't plan to go public may have to deal with compliance anyway, if they have clients facing the issue. For example, if the company has a large financial institution or healthcare company such as Citibank or Blue Cross as a client, it's likely that there could be compliance mandates about how information is delivered electronically, whether instant

electronic records and often employ open wireless networks.”

In these companies, too, there could be compliance issues brought on by denial of service attacks or spam, Freericks adds.

**IT, Inform Thyself**

The bottom line, many say, is that smaller companies should be aware of compliance but not overly concerned about the regulations if they're not directly affected by vendor or client considerations.

But as laws change, it's helpful to stay current with updates and perhaps even call in a consultant to do a quick check to see where a company might stand with compliance. But beware of the in-depth fix, Bowden notes. Look for a consultant that can tailor advice and policies according to company size, rather than one who wants to make an SME fully compliant unnecessarily.

Instead, compliance can be used as a guide, Bowden adds. After all, many companies could benefit from more comprehensive procedures and policies, and following regulations could provide a handy framework. If a data center manager and a consultant approach the issue

from this angle, it's likely to be far more efficient than merely trying to follow laws.

“Just watch out for any guerilla answers to the issue, with people pushing spreadsheets and wanting to assign more people to the task,” says Bowden. “Compliance for SMEs can be taken slowly and built over time. That way it can drive changes and improvements rather than become a burden on resources.”

**Companies that don't plan to go public may have to deal with compliance anyway, if they have clients facing the issue.**

pliance depends on whom you ask. Some in the industry feel it's a nonissue that's been overhyped, especially by those selling products and services around compliance.

until at least mid-2007, says Thomas Tierney, a consultant at IT advice firm Forward Hindsight. Even if new compliance mandates are created, though, deadlines for meeting the mandates would be at

**When To Worry About Compliance**

- When a company is about to go public, but compliance procedures haven't been put into place.
- If vendors have to be compliant but are lax in communicating that to the small to mid-sized enterprise.
- When accounting procedures at a company seem to be problematic, or there's high turnover in that department.
- If the company has no audit processes in place for financial or accounting information.
- When the CEO and CFO don't take compliance seriously enough, even though vendors or clients may see it as a priority.

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# Compliance Control

*Continued from Page 1*  
communicating policies that apply to the organization, as well as giving people rules to follow those policies and then enforcing those policies and mitigating any policy issues that result.”

However, communicating the value of those policies can be a tough sell. At a recent Sarbanes-Oxley conference, Bloomberg spoke with attendees about how the regulations can improve business processes and help improve accounting. But when he asked executives if they would actually be following any these compliance-related procedures if it

is sort of scary in a way because you’d think that giving executives better visibility into their finances and [following] the other requirements of Sarbanes-Oxley seem to make common business sense,” he says. “But in many organizations, that would not be a spending priority if it weren’t for the regulations.”

### Stay Flexible

While many experts state that IT-centric automation is key to successfully handling compliance demands, real-world evidence that automation is the answer isn’t quite widespread.

Regardless of the outside help recruited by enterprises to deal with compliance—whether the help arrives in the form of software or consultants—the in-house IT staff must play an integral role in the process. With multiple regulations bearing down on the typical IT department, it’s a daunting task to motivate IT to adhere to the often thankless task of record storage and compliance.

“Companies aren’t in the business of complying with regulations; they’re in the business of making money by building products and offering services that their customers like better than [products and services from] the other guy,” Bloomberg says. “How can companies be flexible enough and cost effective enough to meet those customer needs better than their competition? The real answer is to be able to leverage IT in more flexible ways.”

Flexibility is key, especially in today’s corporate culture, where there’s no way to determine whether existing regulations will change or when new regulations will emerge. Bloomberg explains that IT should always be involved in the governance process, where it can be called upon to provide, for

# Increased Confidence

Chief financial officers are more confident in their companies’ financial reporting today, according to a recent survey developed by Robert Half Management Resources. Based on responses from 1,400 CFOs from U.S. companies with 20 or more employees, the report found that 34% of CFOs in the study were more confident in their company’s financial reporting capabilities today than compared to how they felt three years ago.

The study also revealed that among public companies, 39% of CFOs polled feel most confident about the level of internal controls and corporate governance in their organizations, a result that suggests the impact of the Sarbanes-Oxley Act, according to Robert Half Management Resources.

“The Sarbanes-Oxley Act has prompted public and private companies to better align their technology and finance functions,” said Paul McDonald, executive director of Robert Half Management Resources, in a statement. “Replacing outdated business software with newer systems has enabled firms to capture essential data for more accurate financial reporting and thus meet critical accounting mandates.”

## It’s a difficult process integrating compliance into enterprise strategy.

weren’t for Sarbanes-Oxley, the answer was a resolute “No.”

According to Bloomberg, companies aren’t willing to spend massive amounts of money on compliance-related process improvement unless a specific mandate instructs them to do so. “This

Some companies complain that current compliance solutions can’t effectively mesh with their existing infrastructure, a problem that can potentially lead to more security holes and compliance problems than what previously existed.

example, a policy infrastructure or a policy life cycle management capability, where there’s always a way to store policies, update them, and retire them over time.

### Expect Change

By adopting a service-oriented approach, companies can organize their IT departments to meet an entire range of business needs, Bloomberg says. With closer relationships between business and IT

personnel, companies can be more adept at recognizing which regulations affect which processes and how they affect them.

“Business needs are always going to be changing, and companies need to realize this,” Bloomberg says. “One thing about regulations is they’re arbitrary. A legislature anywhere around the world can just make a new one, just because they feel like it. There’s no rhyme or reason to it.”

# The Eyes Have It

*Continued from Page 1*  
that has to be focused near the back of the eye.

Because of the advances made in iris scanning, the field is maturing rapidly, with readers being developed that can be up to 24 inches away from the eye or do a reading

with a single pulse of light. Currently in development are readers that are better at capturing information of people “on the move,” Fitzsimmons notes, so that airline travelers or those walking in a company hallway can be scanned without having to stop and gaze into a reader.

“The challenge with the market is that fingerprints have had about a 100-year lead on the iris in terms of being used for identification,” Fitzsimmons notes. “But development is advancing, and adoption is increasing, especially at airports.”

So far, he says, an iris system is in place at eight Canadian airports, as well as Heathrow Airport in the UK. Saudi Arabia installed the technology to track visitors, and Singapore launched a trial program to screen workers who cross its border every day.

### Looking Ahead

As the prices for iris recognition readers and software go down, Fitzsimmons believes that more small to midsized enterprises will be eager to take advantage of the technology. Currently, the cost of the readers is around \$3,000, but next year Iridian plans to release “iris on a chip,” which will cut the price of the readers in half and let users do iris recognition on PDAs and other handheld devices.

PC manufacturers could also fuel a boom by building in iris recognition to the hardware. In January HP launched an initiative at a school district in New Jersey, including iris recognition in its blade server there as a way to improve overall school and student safety and reduce administration costs related to student attendance.

Collaborating with Eyemetric Identity Systems, HP says that it chose iris recognition

because it’s quick and noninvasive, unlike fingerprint technology. A similar implementation in another New Jersey district in 2003, also centered on iris recognition, resulted in quicker database searches and lower administration expenses.

As such implementations yield better results and the costs of technology drop, iris recognition could be the biometric of choice for schools, data centers, and companies of every size. “There aren’t any deployable biometrics that can touch the accuracy of iris scanning,” says Fitzsimmons. “You can be recognized against a database in less than two seconds, you don’t have to touch a sensor that 2,000 other people have touched, and it’s easy to install.”

## A Sampling Of Iris Recognition Products

Product	Description	Web Site
<b>Iridian KnowWho Authentication Server</b>	Adds network scalability and processing speed to enable iris recognition for large-scale applications	www.iridiantech.com
<b>IriTech Iris2000</b>	Combines iris and facial recognition and is compatible with third-party camera systems	www.iritech.com
<b>LG Electronics IrisAccess 3000</b>	Connected to a server or database, the desktop unit also features voice prompts and easy installation	www.lgiris.com
<b>Panasonic BM-ET100 desktop camera</b>	PC iris recognition camera that can also be used for videoconferencing; does scans at up to 21 inches away from the face	www.panasonic.com

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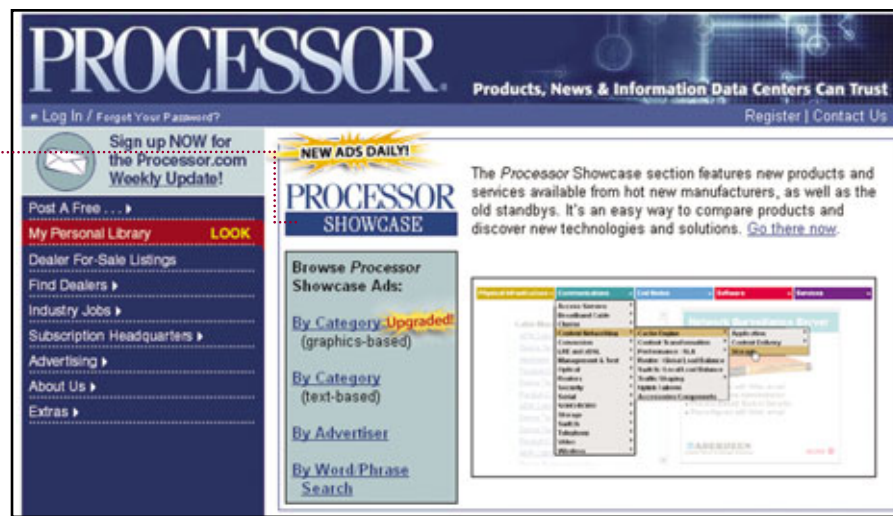
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# Coping With Compliance

## Software & Hardware Tools Offer Help With Sarbox, HIPAA & More

by David Garrett

NO ONE SAW ENRON coming. Save for a few insiders (some who tried to hide the truth and some who tried to expose it), the business world was grossly surprised by the implosion of one of its brightest stars. What's more, the laws passed in Enron's wake have left more than one firm in a state of confusion over how to comply.

Most of the new laws aim to shore up a firm's accounting practice. And because modern accounting relies largely on IT, today's IT managers have become as fluent in Sarbanes-Oxley, aka Sarbox, as some CPAs. When you add HIPAA, Gramm-Leach-Bliley, and recent National Association of Securities Dealers regulations to the mix, compliance is daunting.

But as with most things, there's help. From large-scale software to smaller apps that tackle only one facet of compliance, such as encryption, the compliance market is hot. Forrester analyst Paul Hammerman, for instance, predicts the market for Sarbox tools alone will grow to \$376 million in 2008, up from today's \$200 million.

### What's Out There

No tool is a silver bullet, and no tool can guarantee full compliance. Instead, these tools help a firm come to grips with the sometimes crushing demands of recent laws and to structure compliance projects that meet those demands.

Much of the market's current software entails some form of formalized governance, most often COSO or COBIT. COSO, short for the Committee of Sponsoring Organizations of the Treadway Committee, is a governance system designed to promote fair and transparent financial reporting. COBIT, short for Control Objectives for Information Technology, is a governance system that applies solely to IT and includes more than 300 control objectives for everything from planning to deployments.

Many of the tools below sport COSO or COBIT features and run the gamut from single-function software and hardware, including encryption tools, to ERM (enterprise risk management) dashboards, governance apps, add-ons to existing CRM and ERP tools, and small database systems to inventory, test, and audit controls.

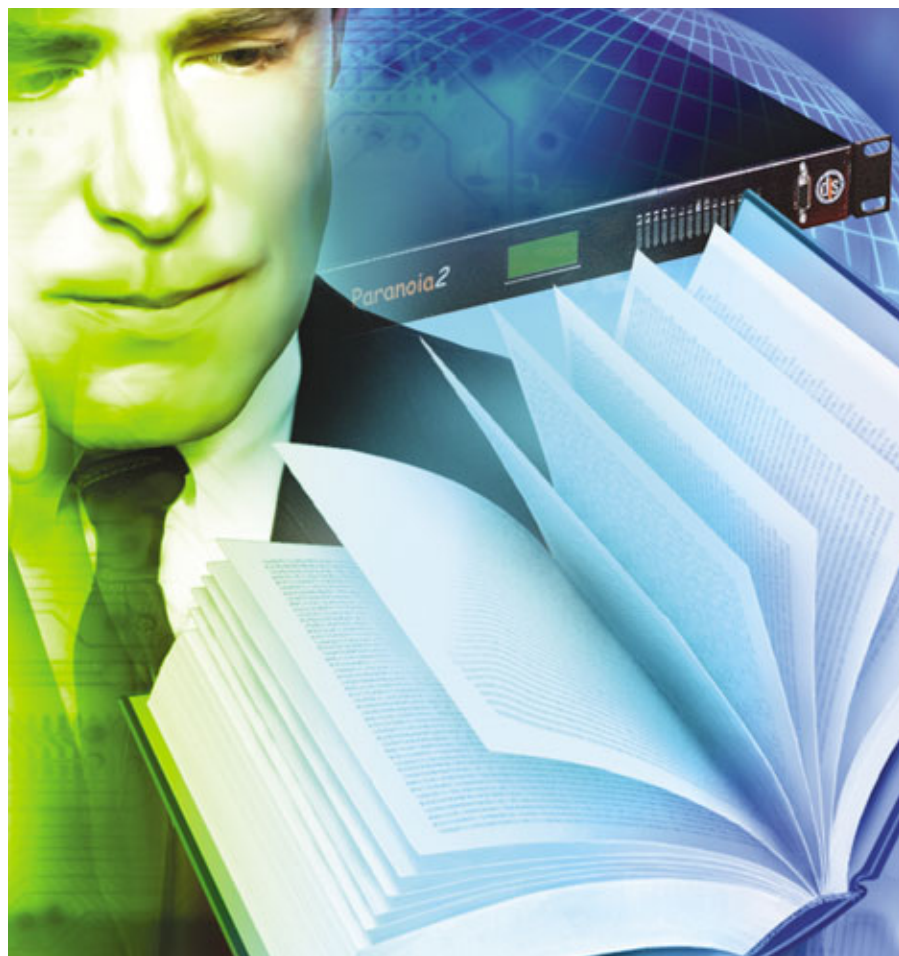
### Certus: Full-Featured Compliance

Founded in 2001, this California firm is a leader in high-end compliance software. The Certus Governance Suite ([www.certus.com](http://www.certus.com)) helps companies plan, implement, monitor, and audit Sarbox controls.

The software includes "best practice frameworks" for COSO and COBIT and has many building blocks: Certus for Portals (to build accounting portals for review and reporting), Certus 404/302 (for the two most famous—and controversial—sections of Sarbox), and Certus Audit, among others. This last tool cuts the costs of audits by cutting the time and manpower they demand and by collecting the documents needed to prove a control's efficiency.

### Knock Your Sox Off

But not all Sarbox software is as large or as expensive as Certus. Macy and Associates' Knock-YourSoxOff ([www.knockyoursoxoff.com](http://www.knockyoursoxoff.com)) is a Microsoft Access



solution designed for mid-sized companies on a budget (it costs less than \$5,000).

The software includes a control inventory that lets you quantify the risk of each control based on the size of the impact. You can also link general ledger accounts to controls and build reports on

which accounts have too few controls or no controls at all.

KnockYourSoxOff also helps you test a control to ensure it works by recording descriptions of the test, who did it, and even employees' answers to auditors' questions. You can also use it to

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# Coping With Compliance

*Continued from Page 11*

keep audit records of as many controls as you like, building reports indexed by risk on the effectiveness of controls.

## Get Paranoid

Some tools focus on a single aspect of compliance, such as encryption. Take Midland Information System's Paranoia2 ([www.midlandinfosys.com](http://www.midlandinfosys.com)), which encrypts backup tapes to guard against embarrassing exposures of customers' private data.

Paranoia2 comes in two flavors: as an external device for turnkey

installations or an encryption sub-system with a private key. A total of 12 encryption levels are offered to lock tapes down; once encrypted, they can only be read by another Paranoia2 device with the matching user and key.

Paranoia2 integrates with standalone drives and tape libraries, has a built-in compression scheme, and offers data transfer rates at 68MBps.

## PostX: Safe Email

ePHI, or electronic protected health information, is a term that's familiar to any IT manager

who deals with HIPAA. Among its many provisions, HIPAA mandates the near-complete privacy of patients' health data, a problem if that data is sent over email.

Enter PostX ([www.postx.com](http://www.postx.com)), makers of a set of email encryption tools endorsed by the American Hospital Association. The PostX platform, which includes PxE-Mail, PxE-Envelope, and Secure-Email, lets hospitals, clinics, insurance companies, and other medical firms send encrypted emails to clients without any client-side software. It also gives IT managers a way to enforce

email policies using the PostX Policy and Rules Engine, which scans email for keywords that imply the presence of ePHI, such as private or confidential. When those keywords are found, the email is instantly encrypted.

The platform, which includes software, hardware, and Web services, also offers read receipts, message tracking, reporting, and message expiration.

## Use What You Have

If you depend on a major vendor's ERP or CRM app, you may have compliance software on your network already. Take SAP's mySAP ERP Financials ([www.sap.com](http://www.sap.com)), an accounting tool for midsized and global firms alike. It has a number of governance features to cope with Sarbox and other regulations (and languages and currencies) in foreign markets. It's also COSO-compliant, has an advanced audit and reporting system, and boasts a number of industry-specific features.

And then there's Microsoft. If the notion of spending hundreds of thousands of dollars on compliance tools is daunting, you can build a compliance system with the Microsoft tools you already have, adding SharePoint and InfoPath to the mix ([www.microsoft.com](http://www.microsoft.com)). Just ask Remedy Intelligent Staffing, which used Microsoft tools to build a Web-based library where all control documents are stored. It has basic document management features, such as version control, access control, and timestamps, to give auditors the raw data they need.

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It saved Remedy money, too. "I was going to have to hire someone to manage the documentation, but with the solution I don't need to," says Stacy Lax, Remedy's director of internal audit. "Right away, the solution has saved us from needing to fill a \$35,000 to \$40,000-a-year position." ■

## Products & Features Comparison

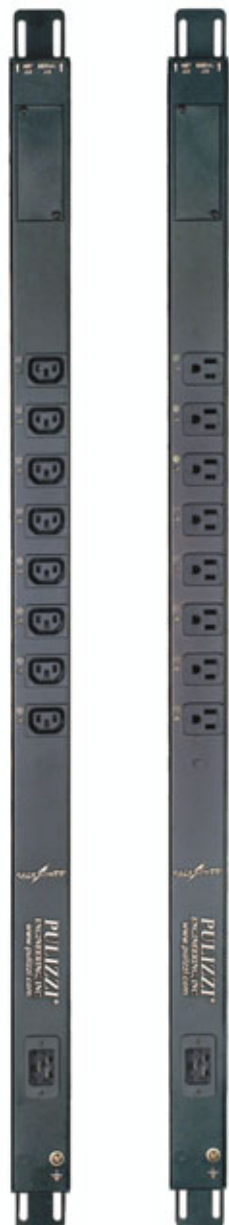
Product	Web Site	Features
<b>Certus Governance Suite</b>	<a href="http://www.certus.com">www.certus.com</a>	A full-featured Sarbanes-Oxley tool for building Sarbox programs from the ground up, including planning and testing of controls
<b>KnockYourSoxOff</b>	<a href="http://www.knockyoursoxoff.com">www.knockyoursoxoff.com</a>	A smaller, Access-based Sarbox tool for managing controls; designed for the midsized enterprise
<b>mySAP ERP Financials</b>	<a href="http://www.sap.com">www.sap.com</a>	Has built-in governance features to assist in designing, testing, and documenting controls and dealing with regulations across borders
<b>Paranoia2</b>	<a href="http://www.midlandinfosys.com">www.midlandinfosys.com</a>	Encrypts backup tapes to prevent exposures from loss or theft
<b>PxE-Mail, PxE-Envelope, SecureEmail</b>	<a href="http://www.postx.com">www.postx.com</a>	Tools encrypt email and are endorsed by the American Hospital Association; principal focus is HIPAA
<b>SharePoint &amp; InfoPath</b>	<a href="http://www.microsoft.com">www.microsoft.com</a>	Smaller firms may opt to build document libraries and other documentation or audit systems with existing Microsoft tools to save on deployment and training costs

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The VPC3106 series is made with rugged steel and has a black finish. The unit is 68 inches tall without the mounting brackets and 70 inches with the standard brackets installed. (Optional brackets allow mounting to virtually any rack or any location.) The input power connector is a three-phase 120/208 volt 30 amp, NEMA L21-30P, connector. The VPC3106 series comes standard with a 15-foot power cable. There are three circuit breakers, each protecting a section of eight outlets. The circuit breakers meet UL and NEC requirements for branch circuit protection, ensuring safe and code-friendly installations. Each circuit breaker has an indicator light. To ensure secure connections, the VPC3106 is compatible with the cable restraint and management system KIT-CABLRES-23 (ordered separately).

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**Manufacturer Presentation**

Physical - Power Protection Advertisement

## Pulsar MX 5000 RT UPS



Starts at \$3935

The new **Pulsar MX 5000 RT UPS** surpasses competing units with its 0.9 power factor delivering 4500 watts of power, built-in redundancy capabilities, hot-swappable batteries, and power modules, along with integrated output receptacles for true plug-and-play functionality. With up to 18kW, this scalable solution provides the highest power density in the industry.

Designed to deliver the highest level of protection for 20 to 110 servers, the online double-conversion Pulsar MX UPS uses modular redundant architecture that can easily scale power and runtime as demand increases or when users require higher levels of availability. Using only 3U (5.25 inches high) for the combination of power and battery submodules, users can configure the new units as freestanding tower or rack-mounted systems.

With built-in network manageability, the Pulsar MX systems are ideal for protecting high-performance workstations and servers in operation-critical server and network rooms. The 5kVA compact unit features front access hot-swappable battery and power submodules, auto battery-test, multilingual LCD, and intuitive power management software. For extended backup time, users can add external battery modules to achieve up to two hours of runtime. To help preserve battery life, the Pulsar MX 5000 RT units accept wide input voltage and frequency ranges to avoid using the batteries unnecessarily. Standard internal bypass ensures added reliability by supplying utility power to connected equipment in the event of a UPS fault.

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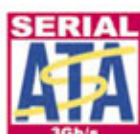
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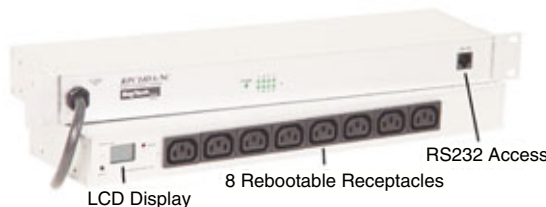
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## Product Releases

### PHYSICAL

#### Cable Distribution

■ **Telect** released its LCX line of rackmount fiber-optic panels with a complete list of standard patch, splice, and combination configurations. The LCX line supplies standard bulkhead-style options to fit various applications. Standard patch panel options include 4U 72- or 96-port, 3U 48-port, 2U 24-port, and 1U 12-port. Combination panels have both splice and patch capabilities with options ranging from 12-fiber with 2U to 96-fiber with 4U. LCX panels all include industry-standard rackmounting and are available with snap-in patch plates in all standard connector options, as well as wall-mount distribution boxes.

#### Power Distribution

■ The MT3 series of vertical 60A rackmount PDUs from **Aphel** delivers total power ranging from 5,000 to 10,000W. With Aphel's patent-pending rPower technology, users can read the high-resolution display from a maximum distance of 12 feet or through the enclosure door's perforation. Aphel also claims that rPower bolsters installation flexibility by connecting to traditional console port switches. The PDUs support both standard and blade servers, and optional RS232 metering

or remote monitoring capabilities are available. Aphel claims the MT3 series' fuseless design minimizes reset time, and its isolation hardware enhances product grounding.

■ There are four new additions to the **Minuteman** line of UPS power distribution products from Para Systems, including 15A and 20A PDUs with eight, 10, or 14 outlets. Each allows vertical and horizontal mounting in various form factors, including 0U. Prices range from \$35 to \$65. Future announcements will include a PDU that can protect 30A and 15A devices simultaneously.

#### Power Protection

■ **Emerson Network Power** announced the 1920 VA Liebert PowerSure PSI, which boasts a two-year replacement warranty, programmable voltage settings that let customers use the UPS in any country, and adjustable voltage window transfer settings for added reliability. The 2U UPS supports replaceable batteries any time and is ready out of the box with batteries included. Customers can also order PowerSure units that are network enabled.

#### Racks & Furniture

■ **Optima EPS** released the M2 Series cabinet for mobile applications. The M-series cabinet is available in heights from 52 to 77

inches and depths up to 42 inches and is configurable in multibay systems. M-series cabinets have been tested to the DoD's (Department of Defense's) MIL-STD-810F standard. The cabinet is built with heavy-duty single- or double-walled extrusions, internal reinforcing corner keys, and four-way crimped and welded corner sockets. M-series cabinets have front-to-back stiffeners, cross bracing, and an optional seven-gauge welded steel base that can be bolted down. Customers can tailor the M-series with a range of industry-standard size, cabling, cooling, and power options with custom color matching. The front and rear doors open from the center for access in confined spaces.

### COMMUNICATIONS

#### Router

■ **Juniper Networks** introduced the M120, a 10 Gigabit-enabled multiservice edge router designed for traditional and mobile telecommunications providers, cable operators, and large enterprises. Possible applications include scalable multiservice edge for small to medium-sized points of presence, core networks for Internet peering and route reflector applications, and a collapsed POP router to provide an edge services and backbone routing platform. The M120 can handle up to 128 Gigabit Ethernet sub-

scriber ports and two 10GB uplinks. The unit features Juniper's I-chip packet forwarding engine technology that lets businesses expand services and clients without suffering a performance hit. The M120 also supports 1+1 and 1:N redundancy configurations for improved reliability.

#### Security

■ **Aventail** introduced the ST2 SSL VPN remote access platform for controlling remote access to a network and supporting NAC initiatives. The ST2 provides universal access through a single gateway and offers central management for methods of connectivity. Aventail ST2 SSL VPNs provide secure connections for devices with Windows, Windows Mobile, Linux, and Mac OS. Aventail also has added Device Watermarking, which uses certificate-based identification of Windows and Windows Mobile devices. Other new features include SSO support with Dual/Stacked Authentication and Forms-Based Configuration, Session Persistence, improved Citrix compatibility, and a new NAT mode for Smart Tunneling. The EX-750, EX-1600, and EX-2500 products will all be available next month for \$3,995, \$9,995, and \$22,995, respectively.

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# Expand Your Storage

## LaCie Offers Two-disk External Drive Featuring A SATA II PCI-E Card

by Kurt Marko

THE INCREASING popularity of digital media—whether recorded broadcasts or documents stored as PDFs—coupled with incessant expansion of hard disk capacity has fueled growth in the sales of external disk systems, while simultaneously increasing the variety of products available. Furthermore, as disk capacities have outstripped those of removable tape cartridges, external drives have begun replacing tape for many backup chores.

Hooking up external disks once meant dealing with bulky SCSI cables and their finicky termination requirements, but there are now a number of high-speed serial protocols—high-speed USB, FireWire, and eSATA (external

SATA)—that combine outstanding performance with easy (or no) configuration. LaCie, one of the long-time leaders in the external drive market, has recently introduced some new models in its storage line that bundle an eSATA interface card with a basic two-disk RAID array.

The LaCie Two Big RAID system is a compact dual-drive external unit featuring hot-swappable SATA II drives and a built-in RAID controller. It ships with the drives striped in nonredundant RAID 0 for maximum performance; however, the configuration can be changed via a rear-panel selection switch to either RAID 1 (mirrored), concatenated (one logical volume spanning both drives) or JBOD (two independent disks).

By using eSATA as the host interface, the Two Big RAID eliminates a potential performance bottleneck, with LaCie estimating throughput of 110MBps with a striped volume. While high-speed USB and FireWire have become popular drive interfaces, they cannot match the throughput of SATA II, also known as SATA 3Gbps, reflecting its signaling rate. Unfortunately, while all new systems have embedded internal SATA controllers, few if any have eSATA interfaces, thus LaCie bundles a controller using either the older PCI-X (essentially double-data-rate parallel PCI) or the faster PCIE serial interface—LaCie's card sporting two single-lane (x1) ports.

External drives are a common sight at any computer superstore; however, few sport built-in RAID or an eSATA interface, thus LaCie's competition comes primarily

from smaller companies filling a niche. Similar units include Granite Digital's SATAVue ([www.granitedigital.com](http://www.granitedigital.com)); Trans Intl's miniG ([www.transintl.com](http://www.transintl.com)), which is also available in a four-drive model, and G-Tech's G-SATA ([www.g-technology.com](http://www.g-technology.com)). For those needing more than the 1TB a two-drive system can currently furnish, MicroNet's PlatinumRAID Pro ([www.micronet.com](http://www.micronet.com)) and Sans Digital's MobileRAID ([www.sansdigital.com](http://www.sansdigital.com)) both feature five drives, additional RAID levels, and an eSATA host interface.

Some of these competing products don't include a controller; however, PCI-E eSATA cards are quite inexpensive and available from a number of OEMs, including SIIG, Sonnet, and Addonics. For those needing fast, easily configured external storage coupled with



#### SNAPSHOT

##### LaCie Two Big RAID

All include PCI-E SATA II card.  
500GB: \$449  
500GB plus spare 250GB drive: \$569  
1TB: \$879  
1TB plus spare 500GB drive: \$1,179  
Also available with PCI-X card: add \$20

A compact, external two-drive storage system supporting JBOD, RAID 0, or RAID 1 and using the next-generation SATA II interface, complete with PCI Express interface card

[www.Processor.com/LaCie](http://www.Processor.com/LaCie)

the convenience of built-in RAID, LaCie's new Two Big RAID bundle is a winning combination. ■

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## Product Releases

Continued from Page 16

■ **Websense** and **CP Secure** jointly announced the CP Secure Content Security Gateway appliance and Websense Web Security Suite package. The joint offering delivers Web filtering security, anti-malware scanning, policy controls, and real-time protection against Web-based spyware and viruses. CP Secure's CSG uses a stream-based scanning method to filter Web and SSL-encrypted traffic without negatively affecting network speeds. The device also offers email anti-malware and antispy scanning.

### Telephony

■ **TRENDnet's** new ClearSky Bluetooth VoIP Conference Phone Kit provides a wireless solution to the practicality issues associated with Skype and other commercial VoIP services. The kit includes the conference phone base unit and a USB Bluetooth 2.0 adapter that connects to a notebook or desktop PC with Skype installed. The conference phone can then be placed anywhere within 328 feet of the USB

adapter. The conference phone includes a touchscreen display that provides access to all the standard Skype features as well as your Skype contacts. The kit will have an average selling price of \$149.99.

### Video

■ **Tandberg** announced the availability of the Centric 1700 MXP, a high-definition desktop videoconferencing system. The system was designed to deliver extremely clear and true-to-life visual communication between team members located worldwide. The 1700 MXP features an integrated HD camera, a 20-inch flat-screen monitor that can easily switch between video calls and your PC content, and CD-quality audio capability.

### Wireless

■ **Digi International** introduced its ConnectPort WAN VPN S-EvDO, a commercial-grade, upgradeable 3G EvDO router. The router is certified on the Sprint Power Vision network and delivers average download speeds of 400 to 700Kbps and a

top download speed of 2Mbps. Other features include firewall, VPN appliance, switch, and terminal server functionalities. The ConnectPort WAN VPN S-EvDO has a built-in Web interface for local management, or users can utilize Digi International's Digi Connectware Manager, enterprise-grade remote management software. It also offers a built-in Dynamic DNS server to map Internet host names to dynamic or public IP addresses.

■ **Fortress Technologies** announced the availability of the ES520 secure wireless access bridge. The bridge combines wireless, switching, and security services in a single device and can function as either an access point or a self-contained network. The product features Fortress' security expertise with the wireless networking capabilities of Legra Systems, a recent acquisition. The ES520 features a 32-mile maximum range and weighs approximately 3.5 pounds, a relatively lightweight form factor. It has passed numerous security tests performed by such organizations as the U.S.

Army, Navy, and National Guard and was used by the DoD to test emerging communication capabilities.

■ **LastMile Communications** released the WDirect 1000 Information Node, which delivers data and media for any size Wi-Fi deployment. LastMile is targeting the system at campus, enterprise, and municipal uses. The wall- or post-mounted system includes a wireless GPRS modem, as well as Wi-Fi and Ethernet connectivity. It also features services authorization and statistical analysis tracking features, as well as system scalability. The WDirect 1000 has a modular design and includes a local memory cache.

### END NODES

### Barcode

■ **Hand Held Products** released a new verification system that validates printed linear barcode readability and standards compliance. The Quick Check 890 includes Quick Check ImageData software, as well

Go to Page 18

# Information Access On A Need-To-Know Basis

## SealedMedia Express Solution Protects Confidential Executive Communications

by Joseph Pasquini

**DATA ENCRYPTION** is big business, but in an ironic twist of fate, it often eludes upper management. The information distributed among senior executives and board members within any organization is often considered highly confidential in nature. Traditionally, businesses have shied away from electronic solutions, instead

opting to gather board members together in one physical location and even making use of couriers to exchange sensitive correspondence. Intended to help management quickly extend boardroom confidentiality to electronic messaging and digital file formats, SealedMedia Express offers its SealedMedia Express for Board Communications encryption solution.

Supporting up to 20 users, the SealedMedia Express Core System is composed of policy-based rights management, standard document and administrative roles, and standard document formats (Microsoft Office documents, Sealed Text, and Sealed RTF). Other file formats can be added depending upon the needs of the organization. The software encrypts digitized data, keeping unauthorized users from copying, forwarding, printing, editing, or even capturing a screenshot of anything that might be a potential privacy concern.

SNAPSHOT

**SealedMedia Express For Board Communications**

Policy-based core package is priced at just less than \$50,000 for 20 users (including maintenance, installation, and training); additional file formats are also available

Drop-in software solution designed for senior executives and board members to control and protect highly confidential information

[www.Processor.com/SealedMedia](http://www.Processor.com/SealedMedia)

"Customers constantly tell us they need to protect executive- and board-level communications, which often contain highly sensitive, business-critical information," says George Everhart, CEO of SealedMedia. "We ensure such information is not accidentally or deliberately disclosed, whether through a misaddressed email, a leak to outsiders, or even the loss of a laptop. This safeguards the organization's reputation and financial stability."

The primary focus of the SealedMedia solution is its use of encryption to "seal" documents and emails within existing desktop applications without requiring users to remember or manage keys or passwords. A one-time install of the

SealedMedia Enterprise Desktop (the client component) supports current and previous versions of all standard desktop and email applications, including mobile devices. Only end users authorized to do so can open sealed documents and emails, regardless of where they are stored and used. Additionally, IT administrators do not have access to any protected content. According to SealedMedia, a typical corporate installation of SealedMedia Express takes no more than half a day.

For regulatory compliance, SealedMedia Express produces an audit trail of all attempted and successful accesses of sealed documents. Access can also be revoked if there is a change in the board package that makes a document out-of-date.

There are a number of approaches to protecting board communications. Content management products, such as EMC's Documentum eRoom ([www.documentum.com](http://www.documentum.com)), and secure email products, such as Sigaba Secure Email ([www.sigaba.com](http://www.sigaba.com)), have taken steps toward safeguarding executive correspondence and communications. In comparison, however, Express for Board Communications continues to protect a document, even after it has left the corporate repository and been received by the authorized recipient. ■

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## Manufacturer Presentation

Communications - Wireless Advertisement

### RF Spectrum Analyzer For Wi-Fi Networks

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Spectrum congestion in the unlicensed 2.4GHz and 5GHz bands is a leading cause of problems in 802.11 deployments. Growing evidence from wireless infrastructure providers suggests that 30% of problems reported by Wi-Fi customers are actually due to interference. Interference can come from nearby 802.11 networks as well as from a long list of common non-802.11 devices, including cordless phones, wireless surveillance cameras, Bluetooth devices, and microwave ovens. Typical network analysis tools are blind to RF activity. OmniSpectrum provides engineers with a portable, easy-to-use solution for determining which devices, Wi-Fi and non-Wi-Fi, are using the spectrum, and which are jeopardizing the delivery of Wi-Fi traffic.



#### WildPackets' OmniSpectrum

OmniSpectrum enhances 802.11 network analysis by identifying not just other 802.11 devices, but any devices that are generating signals in the 802.11 frequency band, even devices that are unauthorized or transient. Based on patented spectrum intelligence technology from Cognio, OmniSpectrum identifies not only the class of the interfering device, such as a cordless phone, but possible manufacturers and model numbers of the offending equipment, facilitating problem identification and resolution. OmniSpectrum provides the best first line of defense in diagnosing 802.11 problems and complements WildPackets' wireless network analysis products.

OmniSpectrum, which includes a Windows application and a CardBus PC card, costs \$3,995.

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## Manufacturer Presentation

Communications - Security Advertisement

### Britestream Networks & OSST Partner On Scalable Security Appliance

Britestream Networks and Otto Security & Software Technologies (OSST) have partnered to deliver a highly scalable security appliance built on Microsoft Internet Security & Acceleration Server. The New OSST SecureGUARD combines the strengths of Microsoft's ISA Server 2004 and Britestream's SSL Security NIC to deliver perimeter security, branch-office connectivity, Web caching, and maximum SSL performance in one solution.



SecureGUARD

The wide range of security appliances fit from low-cost to maximum-performance solutions. The SecureGUARD Series can be adjusted to suit nearly all of your business requirements for content and information security. Simple, fanless, low-noise, and low-cost models for small and midsized businesses up to highly available enterprise solutions with a maximum of performance.

The SecureGUARD appliance product line for Microsoft ISA Server 2004 delivers a combination of perimeter security, branch-office connectivity, and Web caching in easy-to-use appliances at an affordable price.

"We are very excited to enter into this partnership with OSST," says Bob Weinschenk, CEO of Britestream. "Their delivery of a fully integrated security appliance built on Microsoft and Britestream technologies creates a solution that is both highly scalable and easy to deploy."



BRITESTREAM

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## Product Releases

Continued from Page 17

as Adaptus Imaging Technology 5.0, which lets users comply with ISO/IEC standards. It has a menu-based interface and supports several languages. The Quick Check 890 supports Mac OS, Windows, and Windows Mobile 2003 and offers RS232 and USB or Bluetooth wireless connectivity.

#### KVM & Console Access

■ **ATEN** expanded its line of LCD KVMs with the ALTUSEN KL1116, a 16-port KVM switch housed in a Hideaway console. The KVM also includes a 17-inch LCD, keyboard, and touchpad. Occupying less than 1U of rack space, the KL1116 also features a dual-slide design that lets the console slide back while the LCD stays visible (the display remains visible even when the server rack door is closed) to let IT professionals troubleshoot and manage servers. With two-level password security, the KL1116 prevents unauthorized users from viewing or controlling connected computers.

■ **Digi International's** new Digi Passport is meant as a competitor to traditional KVM over IP devices, allowing administrators to control remote graphical systems using either Microsoft Remote Desktop Protocol, Virtual Network Computing, or XManager for Unix. The Digi Passport features the company's free KVM technology, which provides a graphical KVM connection over a standard network. The Digi Passport includes integrated IPv6 support along with 8, 16, 32, or 48 ports. All models come in a 1U rack-mountable package and a smaller 4-port model is also available. The Digi Passport includes Perl support allowing administrators to write scripts to automate regular tasks, alert administrators to specific situations, or pull information from certain logs. Two Ethernet ports, two power sources, and an internal modem provide redundancy for the Digi Passport.

#### Printer

■ **Lanier Worldwide** launched a range of multifunction printers, including the BP20 and BP20N monochrome laser printers, the AC122 with monochrome printing and color scanning, and the monochrome- and full-color-capable AC031cn. Lanier created the new MFPs for home offices and small workgroups. The BP20 features a USB interface, while the BP20N also features an

Ethernet interface. Both units can produce 22ppm at a resolution of up to 1,200dpi. The AC122 can handle 22ppm at a resolution of up to 600dpi. The AC031cn prints up to 31 monochrome or eight full-color pages per minute and copies up to 21 monochrome or seven full-color pages per minute, both at up to 600dpi.

■ The new Persona M30 ID card printer from **Fargo Electronics** is a monochrome version of the company's C30 and sells for \$1,695 (single-sided printing) to \$2,695 (dual-sided). Ink ribbons are available in seven colors, and there's an optional magnetic stripe encoding module (\$599), as well.

■ **Ricoh** has announced new multifunction printers for medium- to high-volume environments. The monochrome Aficio MP 5500, MP 6500, and MP 7500 Series Digital Imaging Systems offer respective print speeds of up to 55, 65, and 75ppm with a standard 4,300-sheet input tray. Security provisions include an Unauthorized Copy Control feature and support for DOSS. The units also are compatible with GBC's StreamPunch III. Prices range from \$17,000 to \$28,000.

#### Projector

■ **InFocus** added a new projector to its Work Big family. The Work Big IN42 provides 3,500 lumens and has a 3,000-hour lamp. It isn't noisy at 32dB, and the device includes a feedback LED display and a keypad, as well as XGA resolution and a recessed lens. The remote offers a laser pointer, auto-image, and slide advance. InFocus plans to make the \$3,299 projector available during Q3.

#### Server

■ **Sun Microsystems** unveiled the Sun Fire X4500 server, a hybrid data server that utilizes a four-way server powered by AMD Opteron processors. The Sun Fire x64 (x86, 64-bit) server is designed for HPC, data warehousing intelligence, digital media streaming, digital surveillance, and data analysis. The X4500 server offers up to 24TB of storage with a sustained throughput of up to 2GBps from disk to memory. Customers with the Solaris 10 OS can utilize Solaris ZFS and Solaris Predictive Self-Healing with the Sun Fire X4500 to automatically diagnose, isolate, and recover from many hardware and

# Installation-Free Tracking

## B&L's Hosting Option Makes Tracking Tapes Even Easier

by Paul Ferrill

TRACKING BACKUP TAPES has become a high-profile task for many companies under the microscope of government regulators. Most IT departments will have to deal with tape backup in some way, at least for the foreseeable future. Choosing a solid tape management system coupled with solid processes and procedures is the only way to ensure compliance when the auditors come calling.

B&L Associates has offered its VaultLedger product for quite some time. Now

it's introduced VaultLedger OnDemand as a hosted service that takes on the task without the installation and setup hassles. "We see this product appealing to the IT department with limited resources that just doesn't want to deal with the hassles of installing and maintaining one more application," says L.J. DiCarlo of B&L Associates.

Documentation is one key piece for meeting the auditor's requirements. VaultLedger OnDemand generates a complete audit trail to help with regulations including Sarbanes-Oxley, HIPAA, and Gramm-Leach-Bliley.

## Product Releases

application faults. The Sun Fire X4500 server can also run many commercial Linux distributions.

Sun also announced the Sun Blade 8000 modular system of servers, which are designed for high-end x86 computing. The Sun Blade 8000 modular system uses 25% less space than comparable blade servers and is designed to offer twice the throughput with 40% lower power requirements than leading rackmount servers. Sun Blade 8000 is targeted at customers who perform server consolidation and virtualization, business applications, large-scale HPC, and databases running Solaris 10 OS. The Sun Blade 8000 servers also support Linux and Windows, and its server modules use dual-core AMD Opteron processors with Direct Connect Architecture. The servers support hot-pluggable blade I/O adapters based on the PCI SIG ExpressModule standard and don't require new or custom system management tools.

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■ The ES7000/one Enterprise Server from **Unisys** will include support for dual-core Intel Itanium 2 9000 series processors. According to the company, the 16-way server provides 50% more performance for the price than competitor offerings based on older versions of the Itanium processor (Unisys arrived at this conclusion from TPC-H benchmark results). Prices for the ES7000/one with Intel's new dual-core Itanium processors start at \$45,000.

### Storage

■ The durable, reliable, and speedy REV format from **Iomega** has doubled in capacity. Now storing a native 70GB, and up to approximately 140GB of compressed data, the Iomega REV 70GB Backup Drive also reads and writes original 35GB hard disk-based REV cartridges, too. Its rated maximum data transfer speed is 30MBps compared to the first-gen 35GB format's 25MBps max. The new drive sells for \$579.95 (ATAPI) or \$599.95 (USB 2.0). One 70GB cartridge is included; cart prices are \$69 or four for \$249.99.

.....

■ A new InfoStation 5-Bay 3Gbps eSATA RAID hard drive enclosure from **StorCase** supports both PCs and Macs, with Linux support on the way, the company says. The external Infostation comes

with a 2-meter cable and a 64-bit/133MHz PCI-X HBA. It doesn't require bridging to Ethernet, SCSI, or Fibre Channel. It supports RAID levels 0, 1, 10 and JBOD and can be mounted horizontally in a 3U rack with room for a second InfoStation next to it.

### Components

■ **Advantech's** eAutomation Group unveiled the IPC-603MB, a compact 2U rack-mountable chassis that's ideal for applications with limited space. The chassis measures 12.2 inches deep and offers support for both ATX and micro ATX motherboards. The IPC-603MB also includes the following features: diagnostic LEDs, support for two 47 CFM cooling fans, and a shock-resistant disk-drive bay that can hold one 3.5-inch internal HDD and one slim CD-ROM. Advantech includes a 1U-high 300W ATX PSU. The chassis supports Socket LGA775 Intel Pentium 4 processors up to 3.8GHz. It is available for \$285.

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■ **Chassis Plans** has introduced a new 1U enclosure. The F6Chassis Series consumes little space but offers a variety of features. It is designed for both mobile and office settings and fits into spaces that are shallow. The chassis is 17.7 inches deep. It has one front-accessible 5.25-inch drive bay, one front-accessible 3.5-inch drive bay, and one internal 3.5-inch drive bay. The F6Chassis Series cases are made of heavy 18-gauge steel and incorporate five-fan cooling. Custom front panels, paint, and logos are available.

### SOFTWARE

### Application Networking

■ **Packeteer** announced that version 3.2 of its iShared application will be widely available starting next month. The software helps eliminate the number of network devices located at remote offices (such as branch offices) by using WAFS (Wide Area File Services) with WAN optimization technologies to tie central offices together with branch offices. This is the first release since Packeteer acquired Tacit Networks. The additions from Tacit provide improved security and management options. Using iShared, business can integrate several infrastructure services such as Microsoft's System Management *Go to Page 20*

Getting started with the service is as simple as filling out a form over the Web. Once that's complete you're ready to start tracking tapes.


Paul Foret is an IT consultant for a large financial services firm. "We decided to go with the VaultLedger OnDemand product for several reasons. First, we already had a relationship with B&L, so we trusted them as a company. Second, the product met our needs for a more robust tape tracking and reporting tool," says Foret.

VaultLedger OnDemand works with the same list of legacy and open environments as the local installation version. It supports reports from multiple applications including CA-1, RMM, BL/LIB, Symantec

NetBackup Vault, and Tivoli Storage Manager.

"We manage a total of around 550 tapes and typically handle 115 going both offsite and returning. VaultLedger OnDemand handles all the reporting and scheduling so that all we have to do is physically move the media. The reporting tools generate all the information we need to meet our regulatory compliance needs," says Foret.

Automated tracking and flexible reporting make VaultLedger OnDemand an easy choice for any organization needing to comply with stringent regulatory auditing requirements. Because it is a hosted service, there are no software installations or upgrades. The initial cost is much lower than purchasing the product outright and requires no resources to run or maintain.

While there are a number of companies that offer tape tracking software, as does B&L, you'll have a hard time finding any that offer a service like VaultLedger OnDemand. Offering VaultLedger as a service puts B&L ahead of its traditional competitors and gives it another attractive option for new and existing customers. 

## Manufacturer Presentation

Communications - Security Advertisement

# Fast, Invisible Intrusion Prevention Without The Expense

Arxceo's patent-pending technologies, PnPro and Tag-UR-IT, significantly enhance network protection in today's environment. All Arxceo appliances implement these technologies to provide the most robust antireconnaissance technology in the industry—providing anomaly-based intrusion prevention while stopping attackers and worms from probing your network.

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**Ally ip-100 (100Mbps) - \$895**

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- Provides quick deployment; 15-minute installation
- No client impact; no configuration changes to any other devices
- 100% compatible with other network hardware and software

### Tagged Universal Resource Information Transmission (Tag-UR-IT)

- Anomaly and behavior-based detection; no signatures needed
- Tags, inspects, and preprocesses packets before forwarding onward; hardens network traffic before it enters your network
- Provides protocol enforcement, antispoofing protection, and antireconnaissance
- Stops Denial of Service attacks (DoS, DDoS, DRDoS, etc.) along with "slow and low" network reconns—even preventing bouncescans from succeeding

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## Manufacturer Presentation

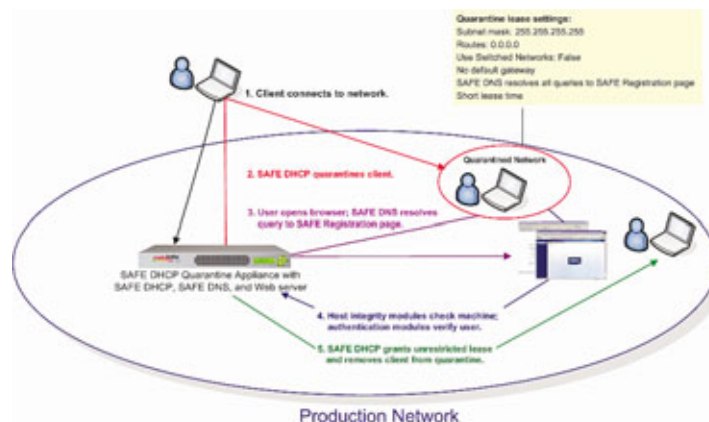
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# MetalInfo SAFE DHCP Quarantine Framework Is The Next Step In Network Access Control

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Using the SAFE DHCP Quarantine Appliance and the MAC Address Authentication Module, network users must pass the host integrity scanning and authentication procedures your site requires. A special DNS internal root service, SAFE DNS, resolves all queries not specifically configured to the SAFE DHCP Quarantine Web page.

You control what happens after a user completes and passes the procedures, but users that fail the procedures remain in quarantine and isolated from the rest of your network.



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### SNAPSHOT

**B&L Associates VaultLedger OnDemand**

\$250 per month

Tracks your important backup tapes without the need to install or update a local software application

[www.Processor.com/VaultLedger](http://www.Processor.com/VaultLedger)

## Product Releases

*Continued from Page 19*

Server (SMS), domain controller, printing, DNS, and DHCP services. Integrating with Microsoft's SMS is a new feature of iShared 3.2 which helps accelerate the download of SMS packages. Finally, with iShared 3.2, customers can install the software alongside existing server software to add WAFS services to the company WAN. Prices for iShared 3.2 start at \$4,600.

### Business Productivity

■ **Nuance Communications** released the latest version of its speech recognition software. Dragon NaturallySpeaking 9 lets users control their Windows-based PCs and applications by giving audible commands. The software handles speech at up to 160 words per minute at up to 99% accuracy. According to Nuance, the software's accuracy is 20% better than the

previous version. The software learns as you talk and does not require upfront training. The program supports Corel WordPerfect, Microsoft Internet Explorer and Office (including Outlook), and Mozilla Firefox and Thunderbird. It also supports certain (Nuance-approved) Bluetooth headsets, as well as thin client Citrix terminals and other network uses.

### Database & Data Mining

■ **Lumigent Technologies** unveiled an enhancement for its Audit DBT database auditing package. The OUM (Obsolete User Manager) feature automatically manages the accounts of transitioned or terminated employees, which lets administrators limit the security threat that these accounts pose. Features of the OUM include integration with human resource, help desk, and corporate directory systems; centralized visibility and

control; and reporting and identification of questionable or orphaned accounts. The Audit DBT is currently available with the OUM component.

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■ **Softek** announced Softek TDMF IP (Transparent Data Migration Facility IP) Version 2.5, a component of the Softek Nonstop Data Mobility software suite. Softek TDMF IP's new features help migrations over TCP/IP within Unix and Linux. A Restartable Full Refresh setting allows existing migrations to restart from the point of a broken network connection. TDMF IP allows up to four times more migration of disk volumes than previous supported volume sizes. Version 2.5 is backward compatible with previous Softek releases and allows long-distance migrations over Sun Solaris, IBM AIX, HP-UX-attached storage, Windows 2003 Server, Windows 2000, and Windows NT.

### Network & Systems Management

■ **BMC Software** introduced Data Center Optimization, which prevents data center sprawl so that companies require fewer servers. BMC also offers ITIL-integrated workflows and ITIL-based extensions for managing and optimizing virtualization. BMC's product helps companies automate activities over the planning-to-implementation life cycle for consolidation and virtualization. BMC's Data Center Optimization includes BMC Virtualizer 2.5, BMC Performance Assurance 7.3, and new tools, such as BMC Atrium CMDB, BMC Discovery, BMC Change And Configuration Management, and BMC Performance Manager 2.1.

### Security

■ **ContentWatch** has introduced two new products to its ContentProtect Professional *Go to Page 21*

# New Blade Switch With Layer 3 Functionality

## Blade Network Technologies Unveils New HP Switch

by Tony Bradley

DATA CENTER real estate is a valuable commodity. Equipment that is too large is not an effective use of available space. Along with the trend of using blade servers to cram more processing power into less space, network equipment vendors have also joined the blade revolution.

Blade Network Technologies develops and manufactures network equipment products that are resold under third-party brand names, such as HP. Its newest blade switch, the GbE2c, was designed in cooperation with HP.

Tim Shaughnessy, director of product marketing for Blade Network Technologies, says, "One of the significant reasons for using a

blade server is the consolidation of multiple servers using common resources and management. By using blade switches rather than patch panels, customers can extend the consolidation to the network."

Using blade switches in a blade server environment offers a number of advantages over standard cabling and patch panels. With fewer cables to worry about, communications between blade servers have less chance of having problems. Keeping network data within the blade chassis also provides less



### SNAPSHOT

#### Blade Network Technologies HP GbE2c

\$1,499

A cost-effective solution with potential Layer 3 capabilities offering static and dynamic routing

[www.Processor.com/Blade](http://www.Processor.com/Blade)

opportunity for attack or interception, even from internal hackers.

The other benefit of reduced cabling is cost savings. With

fewer cables and ports to manage, fewer resources are necessary both in the actual cabling hardware and the man-hour resources to install and maintain the cabling.

The Blade HP GbE2c switch also provides more control over network traffic than a traditional patch panel. Network traffic can be monitored, and bandwidth can be managed via a Web browser console.

The Blade HP GbE2c has to compete with products such as the Cisco Catalyst Blade Switch 3020 ([www.cisco.com](http://www.cisco.com)). The HP GbE2c offers two primary advantages over the Cisco product, however. The first is price. While the Cisco Catalyst switch sells for \$4,400, the Blade HP GbE2c comes in at more than 60% less at only \$1,500.

The other advantage is in the capabilities and functionality of the switch. The Cisco Catalyst is a Layer 2 switch. The Blade HP GbE2c is a Layer 2 switch as well in its native form. However, it is user-upgradeable to Layer 3, and Blade Network Technologies will offer the Layer 3 functionality for a small fee by the end of 2006. ■

# Quad Server Offers Eight Cores

## ASA Offers High-Powered Enterprise Servers With Enterprise Power

by Julie Sartain

TODAY'S MOST DEMANDING business applications require enterprise servers designed with enterprise power, and ASA Computers has a solution for networking speed and efficiency: multicore technology (and/or dual-core computers), the cutting edge for next-generation systems, especially in the networking environment. ASA's new Quad Server has four dual-core AMD Opteron processors—that means eight cores, which means lightning-fast performance for enterprise servers. The 1U Quad Servers feature the Nvidia nForce Pro 2200 chipset-based board, a 1GHz HyperTransport link,

a high-efficiency 1,000W power supply, and they support 16 DIMM slots, all optimized for Supermicro's 1U SC818S+—1000 chassis.

The 1U Quad Servers can be configured to run multiple, different operating systems such as Linux, Windows, and/or BSD, and they support dual boot. ASA's support group is able to customize the Quad Opteron servers for your company's specific applications, and with 128GB of RAM capacity for the eight-way option, your applications will perform at a level never seen before. The 1U Quad Servers maximize performance and minimize cost.

"Our engineering team has logged hundreds of hours running various stretched

## market. The 1U form factor means lower operating costs (because they use less space in the data center), the unique chassis is designed for optimizing airflow inside the servers, and the servers run cooler and quieter.

"Columbia University purchased our 1U quad Opteron servers (the Quad Opteron 870 processors with 8GB memory and the 400GB SATA drives) to run intense simulation applications at their physics laboratory," says Hong. "They told us that the 1U Opteron servers were great, that they met all the requirements for their intense simulation applications, and the systems ran cool and quiet."

Competition includes Sun Microsystems' Sun Fire x64 server family (the Sun Fire X2100, X4100, and X4200 servers; [www.sun.com](http://www.sun.com)), all powered by multi- or single-core AMD Opteron processors that run Solaris, Linux, and Windows. All are energy-efficient, reliable, high-powered, and high-performance systems.

Other competition includes APPRO Systems' 1142H server ([www.approsystems.com](http://www.approsystems.com)), also powered by AMD's Opteron dual-core processors (32- and 64-bit). APPRO Systems also boasts the highest power-to-density ratio, as well as scalability, reliability, and performance. ■

### SNAPSHOT

#### ASA 1U Quad Servers

ASA1178-O4D-SC-R: \$3,072.94

ASA1189-O4D-S2: \$2,811.12

1U form factor server offering four dual-core Opteron processors; can be configured to run multiple operating systems

[www.Processor.com/ASA2](http://www.Processor.com/ASA2)

tests on these servers," says Tai Hong, product development manager at ASA Computers. "There were no lockups, crashes, or errors during the period of testing. This means ASA Quad Opteron servers seriously take care of the power needed by its customers' applications."

The Quad Opteron dual-core servers are also the most compact servers on the

# Product Releases

*Continued from Page 20*

Suite. The latest release is Version 2.1. The new additions include PrivacyProtect and Application Manager. Content-Watch's products have provided Internet filtering and dynamic contextual analysis. They now also offer antiphishing technologies and improved application management. ContentProtect Professional Suite includes CallingID, which verifies information about a Web site's ownership, including its place and date of origin as well as other details. The software alerts a user to suspicious Web sites through site verifications, verification tests, site warnings, and a configurable warning level. Application Manager features application monitoring, Web-based management console, reporting, and security. ContentProtect Professional Suite has an annual licensing cost of \$59.99 and requires the purchase of at least three licenses.

.....

■ **Courion** announced it has added RoleCourier to its Enterprise Provisioning Suite. The role management solution makes enforcing security policies easier and lets users effectively leverage roles. RoleCourier offers a complete approach to enterprise role management by including creation, enablement/disablement, modification, review, and role analysis. Businesses can use RoleCourier to streamline their role governance: The add-on will identify and compare roles that could overlap in an effort to reduce the overall number of roles. RoleCourier can take three approaches to role definition: bottom-up (starting with each user's existing privileges), top-down (determined privileges according to an

organizational hierarchy), or hybrid, which combines the bottom-up and top-down approaches.

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■ **Juniper Networks** released the latest versions of its open standard-based Odyssey Access Client and Steel-Belted Radius software, designed to meet the network access security needs of large enterprise organizations. OAC version 4.5 now features priority and preferred network connections, wireless suppression, username prompt, and additional EAP support. SBR version 5.4 features improved administration and configuration capabilities and enhanced administrator file permission control and logging. Supported operating systems include the latest Microsoft Windows versions, SuSE Linux Enterprise Server 9, Red Hat Enterprise, Advanced Server 3, and Solaris 10.

.....

■ **SurfControl** announced the release of the SurfControl Enterprise Threat Shield 3.51. The latest version of Threat Shield includes a feature designed to prevent information leakage via the USB interface. This security product also features an expanded database that includes signatures to protect against pod slurping applications—programs that enable an unauthorized transfer of data from a computer to a flash drive, iPod, or other small storage device. Besides the new USB protection the SurfControl Enterprise Threat Shield still has an extensive, dynamically updated database to protect against spyware, adware, keyloggers, and other threats.

.....

■ The latest version of **Watchfire's** AppScan and AppScan Developer Edition

provides businesses with the tools they need to monitor the security of online applications. AppScan 6.5 monitors a number of Web applications using its Web Services Explorer. This new feature can simulate application-to-application interaction rather than just user-to-application interaction looking for additional security flaws. AppScan 6.5 can also prepare a number of automated regulator reports. The new version includes two new ISO reporting standards (17799 and 27001). The software also includes updated PCI (Payment Card Industry) standards for protecting credit card information. The software includes features to help penetration testers (such as an alert for weak passwords) and improved accuracy to help eliminate false positives. Finally, AppScan DE is a version aimed at developers that integrates into most development platforms including Visual Studio 2005, WebSphere, JBuilder, and Eclipse to alert developers of potential security holes before the application is deployed.

### Storage

.....

■ **Network Appliance** announced that it is teaming up with **BakBone**, **CommVault**, and **Syncsort** to produce an innovative backup application, NetApp's NearStore VTL Shadow Tape technology. This integration was designed to accelerate enterprise data recovery and integrate seamlessly with current backup technologies from all of those involved in the partnership and Veritas NetBackup by Symantec. The new technology will make it easier for enterprises to adopt and benefit from disk-to-disk backup without changing their existing processes. The technology automates the process of

restoring backup data from a disk that has already been written to tapes and shipped offsite for storage.

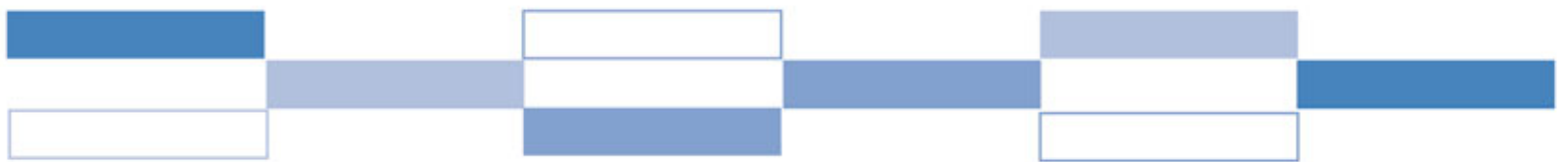
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■ **Symantec** announced the release of the Veritas Storage Foundation 5.0 product family. The software was designed to give both public and private organizations enhanced visibility and control over storage environments. Storage Foundation 5.0 can give users a glimpse into an entire storage environment even if it means doing so across major servers, applications, operating systems, or storage platforms. New with this suite is Storage Foundation Management Server. This program provides multihost management capabilities across Windows, Unix, and Linux operating systems. It also improves an enterprise's service and security levels by identifying risks and offering procedural suggestions.

### Telephony

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■ **Vertical Communications** released the Vertical TeleVantage 7.5. This is the latest release of Vertical's communication product for the IP-PBX medium. The software-based offering features a suite of voice applications including unified messaging, comprehensive call recording, and personalized call handling. TeleVantage 7.5 also has remote login for mobile users, last agent routing for call centers, expanded support for IP phones, and enhanced SIP (Session Initiation Protocol) VoIP functionality. The program is available as a software update, or it also has been integrated with Vertical's MP5000 platform to offer full functionality to customer bases that are up to 100,000 members.



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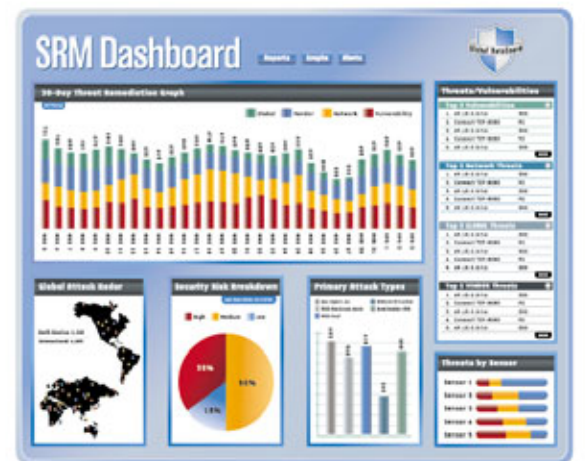
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**Manufacturer Presentation**

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The Linktropy 4500 is designed for ease of use. The Linktropy traffic monitor displays throughput graphs and statistics to help visualize performance. Integrated Ethernet bridging and IP routing functionality make the Linktropy 4500 simple to install in any network while the intuitive, Web-based, graphical interface allows the Linktropy 4500 to be set up and configured in minutes.

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**Manufacturer Presentation**

Communications - Telephony Advertisement

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Cost savings and improved productivity through digital convergence are some of the key elements driving businesses to change from a traditional phone network to a VoIP network. There's no denying it; the advantages are clear, and the demand for VoIP networking solutions is on the rise.

ZyXEL's new SMB VoIP Integrated Access Device (P-2608HWL) and SMB VoIP router (P-2304R) can bridge the move to VoIP for growing businesses. Both products enable multiline VoIP service through one of two options:

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- Integrating with an existing analog PBX system

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For more detailed information on the Symantec Gateway 1600 Series of products, please visit us at [www.Processor.com/Symantec10](http://www.Processor.com/Symantec10)

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# OPINIONS

U P T I M E

## When It Rains, It Pours

We recently discovered that file corruption was occurring on the primary file server for our office in Redmond, Wash. The way we discovered this was not the way you want to find out about this type of problem. We became aware of this problem when we tried to access some documentation that covered critical details of our weekly release plan and found out that the files were corrupted. The person who created these plans was on vacation when we discovered the problem, so we had no way to figure out what the plans should have said and had no choice but to delay our release until this employee returned from vacation. Not the sort of thing that instills confidence in your IT infrastructure!

### The Original Problem

Once we discovered this file corruption, we started scanning the server for other problems and discovered additional files that had been corrupted. We then started combing through the event logs and found a single entry from two weeks back that indicated that the Master File Table on one of our primary file sharing volumes was corrupted. A corrupted MFT means that the integrity of the entire volume is in question,

and the only recourse is to do a full restore of the volume from backup. This shouldn't have been a big deal; after all, this sort of problem is why you do nightly backups. Little did we know that our problems were just beginning.

### Software & Hardware Failures

After notifying our users and backing up the files that had changed since the last backup, we attempted to restore the volume from a tape backup. The restore process failed repeatedly with the Backup Exec client crashing. We then tried—with limited success—breaking the restore job up into multiple smaller jobs. We tried restoring to various locations using different parameters, and eventually we were able to restore approximately 30% of the data.

At this point in the process, one of the disk drives in the array that we were restoring failed. We replaced the drive and started a rebuild of the array. While this was going on, we attempted to restore

to a network share. The restore failed because it lost the connection to the Backup Exec agent, so we attempted a restore without the agent, but it failed as well. We decided to contact Veritas for help.

### Frustrating Technical Support

In my years in the industry, the quality of technical support has



## DANNY CECIL

**AUTHOR** Danny Cecil has 19 years of experience in product development and information technology at various companies, including HP and WildTangent. For the past few years, Cecil has managed data center operations and information technology for several Seattle companies. He is currently the vice president of operations for WildTangent, an online game publishing company in Redmond, Wash.

steadily declined. While we occasionally have good tech support experiences, we mostly don't, and our work with Veritas on this problem was not an exception to the rule. For some reason software support techs always think there is something wrong with your network. They were convinced the

problem was due to a faulty NIC, and we wasted hours of time trying to get the restore to work with a different NIC.

Over the course of this testing, it became clear that our backup server had become unstable, so we made the painful decision to build a completely new backup server with a large enough disk array to

allow the restore to be done locally, avoiding any possible network issues. We then spent more hours with Veritas tech support to get all of our job and media information migrated, which ultimately required a reboot of the server. The reboot triggered a forced chkdsk on the array, which ran overnight but never completed. We then replaced the PERC/4 controller, tried the restore again, and it failed again. Back to Veritas tech support.

This time, after having already spent hours on the phone, tech support informed us that there was a known bug with Backup Exec

versions prior to 10D that caused restores with a large number of small files to fail. There was no knowledge base article or other documentation on this failure; the only way to find out about it was to spend enough time on the phone! After upgrading to Backup Exec 10D, we were finally able to successfully restore the problematic volume, five days after we started.

### Lessons Learned

The most troubling aspect of this experience was discovering that we had allowed file corruption to go undetected for over two weeks. To address this, we are reworking our monitoring solution to make sure that we catch these types of problems immediately. Almost as disconcerting was learning that our backup software had a bug for over two years that prevented restoring large numbers of small files.

Based on this, we're going to take a couple of actions. While we routinely restore files from backup, this was the first time we had tried a restore of this size. We are now going to do large test restores once per quarter. The other change we are going to make is to replace our backup software. It is inexcusable for Veritas to ship a backup product that does not reliably restore data regardless of the size or composition of the file set.

Send your comments to [danny@processor.com](mailto:danny@processor.com)

**This shouldn't have been a big deal; after all, this sort of problem is why you do nightly backups.**

### Manufacturer Presentation

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### Manufacturer Presentation

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# OPINIONS

INFO-TECH • INSIGHT

## Rolling Out Client-Facing Services? Don't Raise False Hopes

A few weeks ago I got on a plane and saw something new on the seat back: an interactive touchscreen.

I've grown accustomed to the new age of flying: no in-flight meals, surly service, and just enough personal space to remain breathing. I already had my iPod in one pocket and an electronic book reader in the other. As soon as I saw the seatback screen, though, I assumed my self-programmed entertainment wouldn't be needed.

I was wrong.

### A Screen Of Promise

After dutifully reading through the aircraft safety pamphlet—you do read it every time you fly, don't you?—I looked for similar instructions for the screen. There were none.

So I did what every IT geek does: I let my fingers do the walking and quickly discovered that this screen held a lot of potential. The top-level menus promised access to movies, music, television shows, and even cartoons—enough material to keep me busy for far longer than it would take to

get to Boston. I thought I'd found a treasure trove of entertainment.

If only.

### The Long Letdown

As I dug deeper into the menu structure, it became painfully clear that this lovely looking screen was half-baked.

Every second choice returned the same message: "This service is not yet available. Thank you for your understanding." A seatmate crashed his screen by tapping it too quickly. Another traveler lamented the lousy sound quality. Even after he cranked it to full volume, the distorted sound was still overwhelmed by engine noise.

I tried to watch a movie, but it looked like I was watching it through the bottom of a pop bottle.

I gave up. I tried to turn it off, but it would have none of that. I took out my iPod as the screen flickered uselessly in my face for the rest of the flight.

### A Flight Of Disloyalty

In a market where all carriers are virtually identical in their mediocrity, little things such as this are

often the airlines' last option for maintaining customer loyalty. My own loyalty evaporated long before our wheels touched the ground.

This airline would have been better off not deploying this system at all because if it can't figure out something simple, can we trust it to ensure its planes don't fall out of the sky? I wish they'd stick to doing what they do best.

### Lessons For IT

This presents some fundamental implications for IT. We are going through one of the most tumultuous transitions in the history of enterprise technology. Legacy systems that formerly lived behind glass walls and were cared for by white-coat-wearing specialists are now being reborn. By grafting Web services on top of these dusty, old boxes, IT can now deliver formerly closed, green-screen applications to the masses.

The visibility of a given rollout is higher now than it's ever been. Look no further than Web banking, your ATM, or a cell phone interface for proof. Many enterprises today conduct the bulk of their business with clients who never set foot on the premises. They get one virtual chance to make the right impression. And if they fail, customers will seek out competitors by simply moving their mouse.

In this case, my airline put in a barely working system and ended up turning a potential benefit into

a significant negative. Not quite the friendly skies it had hoped for.

### A Better Plan

What this airline should have done was scale back the scope of the initial release. A simplified menu structure incorporating only

the airport check-in kiosk, and information cards tossed into the seatback pockets would have helped. Small messaging cues can go a long way toward setting appropriate expectations for passengers.

Customers in all industries expect consistent experiences that



AUTHOR

**CARMI LEVY**  
Carmi Levy is a senior research analyst with Info-Tech Research Group, a London, Ontario-based research and professional services firm. He is the author of Info-Tech's *Optimizing Your IT Infrastructure best practices methodology*, as well as the 2005 research report, "Building the Next Generation Help Desk." Levy holds a journalism degree from Montreal's Concordia University and has extensive experience in IT project management, helpdesk re-engineering, high performance team leadership, and process redesign.

the services that could be delivered would have kept end-user frustration in check. You can't be upset by something you do not miss.

The airline also failed to properly assess the end-user experience. I somehow doubt they sent testers to the seats to see how the thing worked. If they had, they would have simply left it unplugged.

Finally, they failed to educate the end user. Granted, it's impossible for flight attendants to spend time with every passenger to explain what is essentially a plaything. But documentation on the corporate Web site, an on-screen reminder on

do not let them down. IT has the power to deliver phased solutions that meet and exceed customer expectations. Whether in the air or on the ground, take the time to apply a disciplined approach to client-facing applications or risk losing those clients for good.

And if you're in the airline industry, consider redirecting the money spent on lousy in-flight entertainment systems toward something passengers would actually appreciate. Like in-flight meals. ■

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### Manufacturer Presentation

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## SuperTrak EX16350/EX16300 16-Port SATA 3Gbps RAID Controller

From Promise Technology

### SuperTrak EX16350/EX16300 highlights:

- 16-port SATA 3Gbps advanced RAID controllers
- Intel IOP 333 (EX16350)/331 (EX16300) processor
- RAID support 0, 1, 5, 6, 10, 50
- PCIe (EX16350) and PCI-X (EX16300) host bus interfaces
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- Linux open source driver available
- 256MB onboard cache
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- Optional battery backup module available



The SuperTrak EX16350 and EX16300 from Promise Technology are Intel IOP-based RAID5/6 controllers that combine high performance with unbeatable prices. The SuperTrak EX16350/16300 controllers include Promise advanced RAID features such as multiple logical drive support, media patrol, and bad sector remapping for maximum data protection and management.

The SuperTrak series is designed to fulfill the needs of SIs and OEMs with demanding data storage requirements. The SuperTrak controllers deliver exceptional multi-drive performance by taking advantage of Intel's XScale I/O processor technology to offer the ultimate RAID 6 protection for high-level fault tolerance, allowing multiple simultaneous drive failures without downtime or data loss so your data is always protected.

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Manufacturer Presentation

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Key Features Include:

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Full iSCSI Benefits

The UltraStor IP system has dual GbE ports, supporting full iSCSI offload with load-balancing and failover and one logic volume shared by as many as 16 hosts. Other new features introduced in the UltraStor IP system include MPIO support, S.M.A.R.T. disk monitoring, target authorization via IP address, and Jumbo frame support.

UltraStor Product Availability and Host Flexibility

UltraStor IP is available for immediate delivery in the form of a 2U eight-disk RS8 IP model, which has the storage options of 1TB, 2TB, or 4TB; the 3U 16 RS16 IP model can go up to 8TB.



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Manufacturer Presentation

End Nodes - Printer Advertisement

TallyGenicom's New High-Speed Serial Matrix Printers Have Multiple Connectivity Solutions

TallyGenicom announced the 2265+ and 2280+ models of the 650 and 900 cps serial matrix printer family for time sensitive and critical business printing applications in industries such as warehousing, manufacturing, transportation, retail, and others that require multipart forms printing.



The 2265+ printer is available in a variety of configurations, making it the ideal choice for multiple connectivity environments. The configurations include parallel only, parallel with serial, internal Ethernet, PCL, and LAN IPDS for IBM AS400/series users. List Prices range from \$1,845 to \$2,227.

The 2280+ is available in a variety of configurations, including serial, parallel, PCL, internal Ethernet, and LAN IPDS. List Prices range from \$2,543 to \$3,709. The 2280-2T+ will be available in July 2006 for users that require the ability to print up to nine-part forms for use in industries such as transportation, customs brokerage firms, and the healthcare field.

'By adding this robust and comprehensive product line to our offering, TallyGenicom is continuing our commitment to our customers by being the solution provider for their changing serial matrix printer requirements' says Chuck Ward, serial matrix product marketing manager at TallyGenicom.

TallyGenicom continues to support Digital /Compaq serial matrix printer users. Included with this announcement is the release of the LA650 + and LA800+ for these legacy applications. These new printers replace prior models 2265, 2280, 7265, LA650, and LA800.



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Manufacturer Presentation

Barracuda Spam Firewall 900
New Barracuda Spam Firewall 900 Raises the Bar for Spam and Virus Filtering for Large Organizations



The Barracuda Spam Firewall 900 offers the largest storage capacity and the fastest throughput available gateway appliance.

The Barracuda Spam Firewall 900 builds on the power of all Barracuda Spam Firewall solutions storage capacity for quarantined messages and to streamline email processing. Similar to its predecessor...

Product Releases

Definition updates occur automatically and users can scan any system connected to the network. An integrated spam blocker helps to filter incoming email without any changes to email programs (compatible with Microsoft Outlook/Outlook Express, Exchange, Netscape, iCalendar, AOL, Hotmail, MSN, and Yahoo!).

Microsoft is teaming up with Whale Communications to support a hybrid IPsec and SSL VPN appliance for large businesses, called Whale Intelligent Applications Gateway, the appliance will be based on Linux and SSL VPN software on a Microsoft ISA Server 2004's backing. Why proxy, and where the device sits behind corporate firewalls it can secure traffic at the layer as it immediately increasing used by other SSL or IPsec tunneling businesses more flexibility in methods available to remote users.

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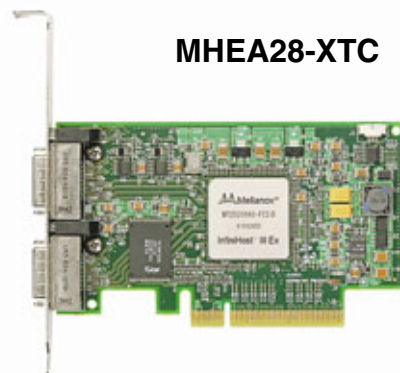
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# Plan For The Unthinkable

## Disaster Recovery Planning For The SME

by Chris Jackson

**DISASTER RECOVERY**, aka DR, planning is akin to creating a will; in your heart of hearts you hope you'll never need it, but not creating one is foolhardy. Unfortunately, many enterprises either fail to create plans for disaster recovery and business continuity or create plans that are inadequate or quickly become outdated.

Yet DR planning need not be analogous to cleaning out the Augean Stables. The process of creating a useful, manageable recovery plan should follow a set of standard steps we outline below. In fact, your recovery plan

should be a living, breathing document that mirrors the growth and changes in your own company.

### How To Create A DR Plan

**Buy-in.** Acquiring executive buy-in for DR planning is essential because creating a robust DR plan requires multidepartmental cooperation. One of the major mistakes companies make is to view DR planning as solely an IT responsibility. IT will usually be one of the main drivers behind the DR process, but leaving it entirely up to your IT staff will produce gaps in business process comprehension, as well as force your IT staff to investigate business

domains that other departments are more knowledgeable about.

**Define objectives.** The first step in creating a DR plan is to define the objectives of the plan: its scope, foreseeable events to plan for, and appropriate parties to involve. During the planning process, these objectives will morph as you progress and over time will change as your business grows. Objectives should be defined in relatively simple, clear terms, and threats to your business should be appropriately measured.

**Focus on core business processes.** The next step is to identify the fundamental business applications and personnel required for your enterprise to operate. During this investigative phase, you'll want to categorize your processes into routine and critical. Remember, you're creating a disaster recovery plan; the loss of a single employee or minor application shouldn't constitute a crisis. Always prioritize the processes involved against the DR objectives you've previously defined.

**Outline SLAs (service level agreements).** With your core business processes identified, you need to determine metrics for each process; in other words,

what level of performance is acceptable for each process in a DR scenario? A cost-effective DR plan doesn't try to provide 100% performance for all business processes; instead, it should focus on providing the minimum needed until the business can resume functioning normally.

**Identify internal dependencies.** It's rare to have business processes function in their own "sandbox." The more common scenario is a cross-departmental process that involves a wide variety of personnel and technology. Documenting the interconnections between departments is vital to successfully planning for their support during a crisis.

**Identify external dependencies.** Although many companies would like to think their success hinges solely on their own efforts, it's the rare enterprise that doesn't partner to some degree with a third-party vendor on a routine basis. Whether it's a publisher relying on a printer or a manufacturer with a sole source vendor, companies continually (and optimally) rely on other businesses to perform tasks outside of their own area of expertise. Be sure to identify these dependencies, so you can accommodate them in your DR plan.

**Investigate solutions.** With your objectives defined, your critical processes enumerated, and the appropriate parties identified, it's time to investigate solutions for maintaining these processes at the appropriate service levels. One strategy is to play the "what if" game. If your home office

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were struck by a hurricane or other natural disaster, where would you relocate the staff? Would you maintain secondary sites for staff and equipment?

Although you should use the initial objectives you defined as  
*Go to Page 30*

## The Value Of Consultants

Hiring a consultant to develop your DR plan is an enticing thought for many IT managers; you're free of the drudgery involved, and you also get a pair of seasoned eyes that can bring a wealth of experience to the process.

However, don't be fooled into thinking it will reduce the amount of effort required by your company; although a good consultant will have more experience in DR planning than in-house staff, they won't know the ins and outs of your enterprise as well as you should.

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# Pitfalls Of Server Virtualization

## It's More Than Just Technical

by Robyn Weisman

VIRTUALIZATION HAS come to the forefront recently for several reasons. The potential to save money and to consolidate servers and storage is bound to appeal to any IT manager who works within a budget or has limited space in which to house servers and storage devices (in other words, pretty much everyone). "A few years down the road, virtualization will be the standard, the norm," says Michael Materie, product line manager for Diskeeper. And *Processor's* in-depth coverage of virtualization a few months back (see the "Where To Find More" sidebar for more information) illustrates that SMEs have as much to gain, or more, by incorporating virtualization technology into their networks.

At the same time, "virtualization doesn't solve the world's problems," says Illuminata senior analyst Gordon Haff. "It's like any technology. There aren't pitfalls

per se so much as caveats to be aware of."

"You've got to know what you're doing as with any technology. You have to study proper configuration [for your needs] as well as best practices," says Yankee Group senior analyst Laura DiDio. "The pratfalls come when you are badly configuring or misconfiguring or not following best practices. Virtualization is like fire. Fire's a good thing, but you don't carry a lighted match with you at the gas station."

### Understanding Virtualization

While virtualization technology has been touted as the solution to server sprawl and management, an organization must have a management framework and applications in place if it wants its solution to work, Haff says. When these solutions falter, "it's not a failure of virtualization per se but a failure to understand components of virtualization and what it can and cannot do."

Most important perhaps is the understanding that server virtualization is a component of virtualization taken as a whole, Haff

continues. Virtualization in the data center encompasses storage and networking as well. Having a sense of the broader scope is necessary to making sure that companies set up and maintain their virtual servers with as few hitches as possible.

"There is great potential to save money using server virtualization, but the amount of cost savings will be determined by the particular configuration and the know-how of those setting it up," DiDio says. "Some of these things sound

**The potential to save money and to consolidate servers and storage is bound to appeal to any IT manager who works on a budget.**

facile and straightforward, but there are no shortcuts or silver bullets out there."

### Configuration Basics

First off, make sure your physical components are compatible and robust enough to handle your virtualization needs. In other words, make sure you're using approved memory and drivers and check with your vendor about the minimum and recommended hardware requirements for the virtual servers you are planning to set up.

"You wouldn't put a 500-pound man on a Shetland pony, and you can't put four virtual [Microsoft] SQL Servers on a one-processor or two-processor physical server," DiDio says.

Haff agrees that monitoring the load placed on your physical servers is essential. "If you install too many applications using virtualization, you may need more resources because even if [the physical server's] CPU is being underutilized, your memory may not be running these virtual machines, and you may need more resources," he says.

DiDio adds that running an SME makes it particularly important to get these things right

because SMEs typically have less of a cushion than their large counterparts. "If something goes wrong, there's more of an impact on the business in a very short time. So it's doubly important [for them] to spend the money and invest the time either to get their internal staff trained or to hire a consultant and a system integrator to set them up," she says.

### Don't Ignore Licensing Contracts

Virtualization offers huge potential savings in licensing fees, but you must make sure you are familiar with the terms and conditions of your corporate licensing contracts, says DiDio. Otherwise, you may find yourself spending more money inadvertently.

"For example, Microsoft allows you to install SQL Server on up to four virtual servers on a single

## Where To Find More

The March 31 issue of *Processor's* Cover Focus section focused on virtualization and consolidation. To view these articles online, click the Editorial link in the lower-right corner of the All-In-One Search area on the Processor.com home page. Click Browse All Issues and then click the Virtualization & Consolidation link next to the Mar 31 06 issue listing to view the issue.

In addition, Materie says that defragmenting storage allows for faster access to data by consolidating file fragments. When the CPU is not searching all over the hard drive—be it virtual or physical—for pieces of a given file, you can expect quicker performance and a decrease in bottlenecks through I/O channels.

### Or Can You?

For his part, Illuminata's Haff says that the benefits of defragmenting storage in a virtual setup are minimal, even though virtualization has the potential to cause greater disk fragmentation.

"The problem is that CPU and memory are so much faster than disks that optimizing disk speed is like a drop in the proverbial lake," Haff says. "As a last tweak, optimization sometimes makes cost-effective sense, but it is not a problem standing in the way of adopting virtualization." ■

## Watch Out For These Configuration Issues

According to Michael Materie of Diskeeper, here are some configuration issues to avoid:

- Certain technologies don't emulate well. Virtual video cards, for example, will not have the functionality of their physical counterparts—and hardware support won't translate over to the virtual counterpart.
- In host/guest virtualization setups, the host machine views both the user mode and kernel mode in the guest virtual machine as an application; therefore, kernel stuff on the virtual machine becomes user-level stuff, which could lead to havoc if it's fiddled with. A newer, specialized software architecture called hypervisor, which will be available for Windows Vista Server (it's already being used on Unix-flavored machines), circumvents this problem.
- Don't overvirtualize your system. Now that your CPU power is being utilized more effectively, make sure you have enough memory to run your applications and get the fastest storage setup you can afford.
- At the same time, never get in a situation where you overtax your CPU. "That's not a pitfall. That's just the wrong decision, period," Materie says.

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# Keep An Eye On Your Applications

## Maintain Satisfactory Customer Experience Through Application Monitoring

by Will Kelly

APPLICATION MONITORING of your network infrastructure via automated hardware and software monitoring tools is integral for maintaining customer satisfaction as they interact with your SME's online systems.

Scott Safe, vice president of marketing for Network Physics, makers of the NP-2000 NetSensory Enterprise network application management appliance, sees the rise of application monitoring in the small to medium-sized enterprise space driven by the proliferation of the Web into extranets that tie together partners, customers, and buyers. "Monitoring performance for satisfactory customer experience enables you to fix any issues before you lose customers," says Safe.

### The Importance Of Application Monitoring

James Kobielus, principal analyst of data management for Current Analysis, a technology analyst firm, sees application monitoring as a subset of application management important to providing management a view into an application infrastructure's performance, security, and environment. "Application monitoring is important

because you run your business on applications," he says.

"Application monitoring also shows your customers, investors, and partners industry best practices," says Kobielus. As much as application monitoring can support the customer experience, it can also help monitor your applications to see they meet SLAs (service level agreements) you may have in place with customers, making it good for business on multiple fronts.

Application monitoring tools enable your data center team to better serve internal and external customers because your team can be proactive and armed with real-time alert information, so they can hone in and perform appropriate remediation within your application environment. An application and network infrastructure monitored by an application monitoring tool can spare the data center team from being reactive to network/application infrastructure issues, freeing them up for other important business-critical tasks.

Network Physics' Safe says that application monitoring has business relevance because of the importance of maintaining a satisfactory customer experience. The introduction of application monitoring into your

SME can help quell the inevitable finger-pointing that can happen in IT groups during postmortem sessions after a failure.

Kobielus also points out the important assets of application monitoring, including the maintenance of 7x24 operations, audit trails (changes, user access), and legal reason for compliancy programs such as Sarbanes-Oxley and HIPAA (two programs requiring application monitoring of user accesses and events to maintain compliancy).

### Inside Application Monitoring

Application monitoring occurs two ways. The first is nonserver, typically integrated into the application software, with the system monitoring application availability and disk space. Depending on the application, there might be an automated alerting capability.

Second, the requirement for application monitoring has also led to the rise of third-party application monitoring suites that monitor "the customer experience," including transactions over the Internet between the user (customer or partner) and your application infrastructure. Typically, such application monitoring solutions are hardware appliances running hardware agents, software agents, and sniffer software to monitor network traffic. All the application monitoring data is available from a central management console. The real-time data appearing

on the central management consoles shows the status of the network and application infrastructure through various reports.

Application monitoring solutions from vendors such as Microsoft, Attachmate (formerly NetIQ), and Network Physics include a customizable set of alerts that can traffic alerts to the appropriate data center staff for resolution. Deviations in the normal application traffic ebb and flow trigger alerts. The application monitoring tool can send alerts via email, SMS, or IM, depending on the software's feature set. When shopping for application monitoring software, it's important to put configurable alerts as a requirement because it makes mobilizing the appropriate staff to an application issue much easier. For example, if the application monitoring tool detects server issues, it notifies the server team to resolve the issue; if it detects network issues, it alerts the network team.

As the Web has become a preferred applications platform, many application monitoring tools are rising to the challenge to include the monitoring of SOA (service-oriented architecture) and end-to-end monitoring of distributed applications. ■

## Application Monitoring Tools

Product	Features	Price	URL
<b>Attachmate (formerly NetIQ) AppManager Suite</b>	<ul style="list-style-type: none"> <li>Real-time diagnostics</li> <li>Advanced analysis and reporting</li> <li>Automated Workload Capacity Management across Windows, Unix, and Linux systems</li> </ul>	Not available	<a href="http://www.attachmate.com">www.attachmate.com</a>
<b>Microsoft Operations Manager 2005</b>	<ul style="list-style-type: none"> <li>End-to-end service monitoring integrates applications, infrastructure, and end-user perspective monitoring</li> <li>Monitors health of IT services and applications</li> <li>Improves operational efficiency of managing IT environments</li> </ul>	\$6,099 with 10 Operations Management Licenses; pricing varies for MOM 2005 with SQL Server 2005 Technology	<a href="http://www.microsoft.com/mom">www.microsoft.com/mom</a>
<b>Network Physics NP-2000 NetSensory Enterprise</b>	<ul style="list-style-type: none"> <li>Problem Management Dashboard that automatically baselines, sets thresholds, and correlates</li> <li>Application Performance Troubleshooting that breaks down end-to-end response time to server, connection, network, retransmission, and round-trip time components</li> <li>Planning and SLA Analysis, including creating customized SLA thresholds based on any combination of metrics</li> </ul>	Starts at \$9,995	<a href="http://www.networkphysics.com">www.networkphysics.com</a>
<b>Webmetrics AppMonitor</b>	<ul style="list-style-type: none"> <li>Customized monitors providing real-time, multi-POP monitoring, as well as real-time alerting</li> <li>External Web performance monitoring and uptime verification from up to 32 monitoring agents worldwide</li> <li>Central management via a Web-based control panel for hosted service management, problem diagnosis, and report generation</li> </ul>	Standard: \$330 per month; Gold: \$480 per month; Full-Page Standard: \$600 per month; Full-Page Gold: \$750 per month	<a href="http://www.webmetrics.com">www.webmetrics.com</a>

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#### Certeon S-Series

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[www.Processor.com/Certeon](http://www.Processor.com/Certeon)

#### Cesura Business Certainty

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[www.Processor.com/Cesura2](http://www.Processor.com/Cesura2)

#### Gigamon GigaVUE-MP Out-of-Band Data-Access Solution

Provides dynamic connectivity for out-of-band monitoring tools such as IDS, sniffers, and application monitors  
[www.Processor.com/Gigamon](http://www.Processor.com/Gigamon)

#### Lantronix SecureLinx Management Appliance

A master control center that seamlessly integrates equipment connected by console servers, KVMs, and remote power managers  
[www.Processor.com/Lantronix1](http://www.Processor.com/Lantronix1)

#### NetQos SuperAgent

Tracks and measures user response time without desktop or server agents  
[www.Processor.com/NetQos](http://www.Processor.com/NetQos)

#### Network Physics NP-2000 NetSensory Enterprise

Report performance for key business functions, sites, and services and prioritize troubleshooting  
[www.Processor.com/NP-2000](http://www.Processor.com/NP-2000)

#### Northwest Performance Software NetScanTools Pro

An integrated collection of Internet information-gathering utilities for Windows  
[www.Processor.com/NWPSW](http://www.Processor.com/NWPSW)

#### Packeteer iShare

An intelligent overlay between business frontlines and IP networks, Packeteer appliances scale to deliver optimal WAN application performance at every location  
[www.Processor.com/Packeteer](http://www.Processor.com/Packeteer)

## Plan For The Unthinkable

Continued from Page 28

your guideposts, be aware that the DR planning process will often reveal poorly considered objectives, as well as problems and threats that were either ignored or unknown during that phase of planning. Whenever you uncover a potential change to your objectives, be sure to walk through the previous steps for the objective.

**Develop business justification.** Now that you've defined your objectives, identified your critical

processes, and investigated potential solutions, it's time to make a business case for addressing the risk. If this is the first time your enterprise has conducted a DR planning exercise, you'll need to be aware of sticker shock. Mitigating risk is never cheap; however, like insurance, you'll be glad you have it when you need it.

The key to making a successful business case for your DR plan is by using the metrics you've created to assign a dollar value to each

process. By doing so, you can expose the financial risk for failing to meet one of the previously defined SLAs. As you might suspect, your finance department will be invaluable in developing the business case. Of course, we know that they've been involved with the DR planning from the start, right?

### Risk Remediation

Despite all the buy-in, inter-departmental cooperation, and

successful planning, it's not uncommon for an enterprise to be unable to fund all the DR solutions and initiatives to meet the initially defined objectives. This shouldn't dishearten you, nor keep you from attempting to mitigate the risks. Instead, use your DR plan as a tool to continually minimize the risk over time.

When the gap between financial resources and the risks exposed is high, prioritize each risk and set a realistic timetable for addressing the risk. It may take two to five years to mitigate the most serious risks, but each year you'll have sig-

nificantly improved your company's ability to withstand a disaster.

### Rapid Comeback Or Major Setback

A sound DR plan provides immense value for any size enterprise. With the appropriate buy-in from all parties, it can help during a crisis, as well as in planning for future risk remediation. When viewed as a valuable asset instead of a necessary evil, a DR plan is an easy-to-keep-current, comprehensive snapshot of your company's vital technology and business processes. ■

## WHAT'S HAPPENING

# Wolves In Sheep's Clothing

## Identity & Access Management Should Not Be Ignored In The Data Center

by Chris A. MacKinnon

WE WOULD ALL LIKE to trust our employees and coworkers, but according to Ellen Libenson, vice president of product management at Symark Software ([www.symark.com](http://www.symark.com)), a maker of identity and access management solutions for heterogeneous IT environments, oftentimes they are the perpetrators on the network. Libenson knows that there is enough evidence to make enterprises think twice about the freedom that they are giving their employees.

According to a recent study conducted by the U.S. Secret Service and Carnegie Mellon University ("Insider Threat Study: Computer System Sabotage in Critical Infrastructure Sectors"), so-called "trusted users" are responsible for a large number of sabotage attacks and unauthorized access of proprietary information. According to the study, "the majority of insiders who perpetrated sabotage or theft were granted system administrator or privileged access when hired. Destructive acts by insiders caused organizations financial losses, negative impacts to their business operations and damage to their reputations."

### What's Happening

In today's IAM (identity and access management) industry, Libenson says there is little doubt that security and compliance now go hand-in-hand. Achieving compliance and improving data security in the growing heterogeneous IT environment, however, is a challenge.

Symark says most Global 2000 organizations still run mission-critical financial and

supply-chain applications on Unix or Linux boxes. To address the security concerns associated with this type of infrastructure, the company supports more than 31 versions of Unix and Linux. Libenson says, "Many industries have seen a large number of mergers in the past eight to 10 years, increasing the number of heterogeneous IT environments across all sectors. For example, one company may use Sun's product, while another may use a mix of HP and SUSE."

When combined, these companies could potentially have more than 4,000 Unix/Linux servers with up to 20 different versions of Unix running on them. And they all must be centrally managed. Libenson says to handle this vast network, one of these companies might have 200 or more systems administrators, all of whom have privileged access and are managing privileged accounts. "Within this type of scenario, a secure access control infrastructure must be put in place that will pass a compliance audit and prevent a security breach."

Libenson says pressure is coming down from the board level to the IT department.

### The fact that Symark's solutions do not touch the operating system kernel makes them unique in the IAM space.

Fortunately, there are a number of commonalities in many of the security and compliance requirements, and many rely on direction from the COBIT (Control Objectives for Information and Related

Technology) and ISO (International Standards Organization) requirements for internal IT controls to shape their own requirements. Libenson says organizations that deploy products that satisfy requirements outlined by COBIT and ISO can help solve two problems at once.

Libenson comments on the current state of the IAM industry, "The two major business drivers that have made IAM a 'must-have' technology are regulatory compliance and the need for better data security. The number of vendors in the IAM space mushroomed since it became clear that compliance regulations did not only require financial controls but also internal IT controls for all the systems that contribute data to financial documents, statements, and reports." She says many big players entered this market via acquisitions. There have also been some new, smaller entrants in the last four years. Symark has been providing best-of-breed client-server security solutions for IAM since 1995.



According to Libenson, larger firms offer large solution suites, and smaller firms offer identity management applications with focus on the Microsoft environment that center on password management and user provisioning, single sign-on, and self-service password management tools. She notes, "Many newcomers tend to put the Microsoft platform first and neglect Unix/Linux and legacy platforms due to the sheer number of Microsoft servers in the corporate environment of the Global 2000."

### The Symark Way

So why should data centers be interested in Symark's approach to IAM? The company provides solutions to help organizations authenticate and authorize both end users and

troublesome is the unhappy Unix systems administrator who has the root or "super user" password and can inflict the most damage to the organization.

Symark specializes in helping companies protect themselves against internal threats to IT systems and data breaches by so-called "trusted users." Symark's products focus on protecting heterogeneous IT organizations at the systems level by plugging inherent security weaknesses in the operating systems themselves, which can be exploited by hackers or rogue employees.

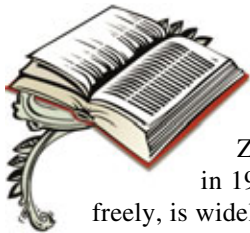
The policy language that Symark provides with its PowerBroker and PowerPassword solutions is a programming language in itself. Libenson says it provides users with the granularity they need to properly manage delegation of root privileges, management of systems access control, and user provisioning. "The policy language is rich and can create filters that granularly define command arguments, command names, host names, and usernames. That same policy language has detailed mechanisms for defining rules for various types of access."

Additionally, Symark's products support accountability requirements by logging keystrokes, user logins, password events, and login failures. This provides a complete log of all sessions, including an indelible audit trail of all user requests. Libenson notes, "Symark's solutions are granular, thorough, and non-intrusive, and they fix the inherent security flaws in operating system without altering the operating system itself."

The fact that Symark's solutions do not touch the operating system kernel makes them unique in the IAM space. Libenson says some competing products use a "mainframe" approach, affecting the kernel and altering the operating system. Symark does not consider this to be a practical approach in many large organizations, as it often requires a long, costly, and painful deployment. Libenson says, "When running mission-critical applications on thousands of servers, companies know there is never any good time to shut them down for a reboot. Symark's solutions require no kernel modifications, binary replacements, or system reboots."

Symark has a new product on the horizon that is scheduled to be available this fall. This new product will further assist organizations with heterogeneous environments to improve authorization, authentication, and administration across many more platforms. ■

## TWO TERMS



### PGP (Pretty Good Privacy)

**What it is:** A protocol used for encrypting messages developed by Phil Zimmermann and made available online in 1991. The software, which was distributed freely, is widely used by Internet users to encrypt email transmissions sent over the Internet. PGP is an implementation of an asymmetric key encryption algorithm, which uses a public and private key to establish the encryption between messages.

**Why you should care:** In the digital age, protecting the integrity of digital information is critical, especially in a business world where so much is done via email, and messages may contain mission-critical information. PGP is but one method—albeit free—that can be used to provide security for your email transmissions. Sure, there are many private encryption algorithms out there, but one advantage of PGP is that it's been in the public domain for so long that the protocol is very much battle tested.

**Related products and manufacturers:** PGP offers PGP Universal 2.0, PGP Desktop 9.0, PGP Encryption Platform, PGP Universal Series 100/200/500, and PGP Whole Disk Encryption

for Enterprises and Professionals, while McAfee offers its E-Business Server and E-Business Client.

### Blowfish (Blowfish Encryption Algorithm)

**What it is:** Developed by Bruce Schneier, a leading cryptologist and founder of Counterpane Internet Security, Blowfish is a symmetric block cipher that uses a variable length (32 to 448 bits) key. Blowfish is open-source code, so anyone can use it without having to obtain and pay for a license. Thus, it is a good alternative for people seeking a strong encryption algorithm at minimal cost.

**Why you should care:** The key fact about Blowfish is that the technology is freely available for use by anyone without incurring licensing costs. So, Blowfish is yet another tool you can use in your quest to secure your information without breaking your budget. Unlike privately developed algorithms, Blowfish's availability in the public domain means the algorithm undergoes frequent testing by researchers trying to break it.

**Related products and manufacturers:** According to Bruce Schneier's Web site ([www.schneier.com](http://www.schneier.com)), more than 150 products use Blowfish. Examples include the Linux 2.5.47 kernel, Novell's iFolder, and F-Secure VPN+. The algorithm is available for download for various languages, including Java, Visual Basic, and C++.

## Next Week In Processor . . .

### Coming In Our August 4 Issue:

With so many tasks on your agenda, hardware maintenance and upkeep is often relegated to the back burner. That's why we've compiled simple, effective tips and expert advice for top data center products, covering what needs to be done, when it needs to be done, and how often.

You'll also find:

- New trends in disaster recovery
- A look at how flat file systems could change your storage plans
- Tips for better backup
- A book review on Susan Snedaker and Russ Rogers' "Syngress IT Security Project Management Handbook"

Be sure to visit [Processor.com](http://Processor.com) to find each week's issue online. You can view issues as a PDF or search our article database for the information you need.

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**High-Definition Line Matrix Printer For Windows-Based Applications**

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Printronix designed the P7000HD for applications typically found in manufacturing, banking, distribution, and transportation environments, such as the printing of reports, bills of lading, multipart forms and bar-code labels. The P7000HD features 11-mil (0.28mm), fine-point hammer tips that print at least 180 x 180 dots per inch (dpi). This resolution rivals the print quality of laser printers at a fraction of the operating cost.

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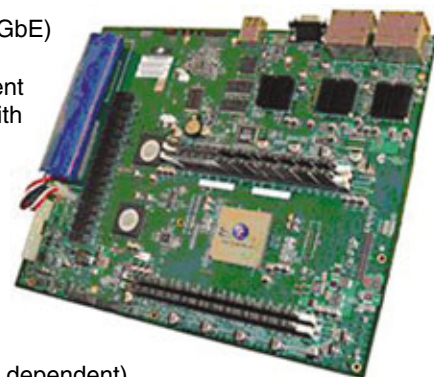
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Backup encryption and data encryption are undoubtedly required to comply with Sarbanes-Oxley, HIPAA, and other government-imposed security regulations. Most companies haven't taken backup encryption into consideration and have only secured their data on their systems from theft or misuse via access controls, firewalls, and specialty software. Few have taken into account the repercussions of a lost or stolen tape backup. Once your data is written to tape, it's completely unprotected. There are no access controls, passwords, or audit trails tied to this data. So without a tape backup encryption solution, all security efforts made thus far are useless. This is why a tape backup encryption solution is necessary.



Your tape backup data is your most critical asset and its potential value for abuse by people outside of your organization is enormous. It's easy to take your unencrypted backup from your backup tapes and read it on any drive, unless tape backup encryption was used. Tape backup encryption is your primary defense for safeguarding tape backups. If you are worried about data protection, disaster recovery, and compliance, you need Paranoia2.

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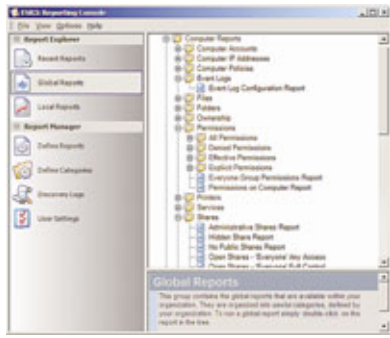
# PROCESSOR

**Manufacturer Presentation**

Software - Security Advertisement

## ScriptLogic's Security Auditing Software: Enterprise Security Reporter 3.0

Enterprise Security Reporter™ is an agent-less, fast, comprehensive discovery and reporting solution for analyzing file security, group memberships and other security settings on Windows servers.



Reporting Console

**Discover**

Centrally audit security settings from Active Directory and Windows servers across your enterprise

**Report**

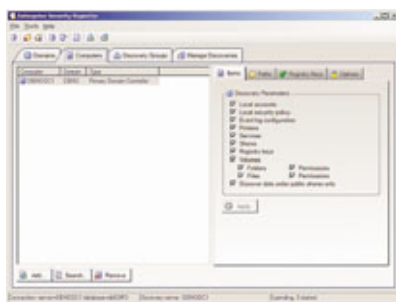
Utilize turnkey reports or create your own with our intuitive Wizard-based report designer to view the security configuration of your Windows environment

**Analyze**

Compare two discovery "snapshots" to detect changes in security that have occurred

**Notify**

Schedule reports to be delivered via any SMTP-based email system



Discovery Console

For a 30-day evaluation, visit [www.Processor.com/ScriptLogic](http://www.Processor.com/ScriptLogic)



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**Manufacturer Presentation**

Software - Security Advertisement

## The CyberAngel® Security Software—Encryption & Tracking “Hybrid”

The CyberAngel® Security Software is a unique “hybrid” solution for data protection and computer theft, combining Data Encryption, User Authentication, and Tracking/Recovery in a single and easily implemented solution. With strong industry-approved (and exportable) encryption, The CyberAngel® addresses Privacy Acts and recent Security Breach Notification Laws, which have enormous notification and liability costs, not to mention the loss of customers.

Custom configured for each client, The CyberAngel® can be triggered by a two-factor authentication or integrated with existing Windows or Novell passwords. If the authentication is violated, sensitive data and applications (such as a VPN) are encrypted and hidden from the unauthorized user, communication ports are blocked, and a covert signal is sent to The CyberAngel® monitoring center. After capturing the location of the computer, we will immediately send a real-time notification to the registered user or organization of the unauthorized attempt to access that computer. The CyberAngel® manages all technical support, password recovery, or anything else the end user may need. Our cost-effective software is compatible with current Windows operating systems, including Windows® 2000, Windows® XP (Home & Pro), and Windows® XP Tablet.

**KEY FEATURES**

- Encryption of Sensitive Data and Applications
- User Authentication (One or Two-Factor)
- Asset/Hardware Tracking & Recovery (LAN, WAN, WiFi, DSL, Modem, Cable, etc.)
- Restriction of Unauthorized Remote Access

**INDUSTRY STATISTICS**

- Over 57% of all network breaches are made from laptops. (FBI)
- 1 out of 10 laptops will be stolen or lost each year. (Gartner Group)
- 97% of stolen computers are never recovered. (FBI)
- 32 States have passed the Security Breach Notification Law, which only applies to unencrypted information.
- More than 32 million Americans have had sensitive personal data exposed over the past seven months and nearly 90 million since the ChoicePoint incident last year.
- 20% of the customers who received a notification of a breach terminated the relationship due to lack of trust. (Ponemon Study)
- \$14 million - Average cost per company with a data breach. (Ponemon)



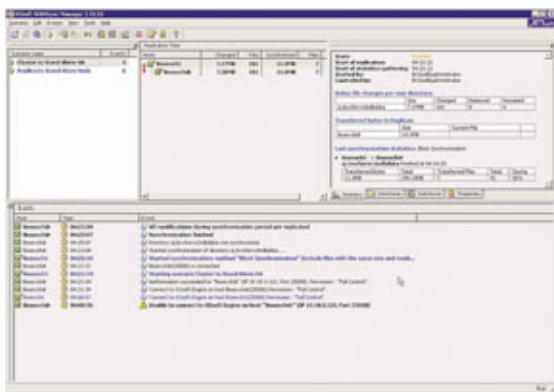
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**Manufacturer Presentation**

Software - Data Replication Advertisement

## WANSync by XOsoft

The WAN-based business continuity platform and data recovery software.



**WANSync**, the definitive, WAN-based business continuity platform and data recovery software. This data protection solution provides companies with continuous business data flow and ensures seamless integrity, reliability, and redundancy of business-critical information resources. WANSync comprises a comprehensive suite of general-purpose synchronization and real-time data replication solutions, including:

**WANSync Server**—for server data replication and increased protection for application servers of any type, including open files and system settings.

A set of dedicated WANSync solutions provide specific application servers with complete availability assurance. These business continuity solutions include:

- WANSync Exchange**—an application-aware high availability platform for Microsoft Exchange, providing Exchange disaster recovery and Exchange replication.
- WANSync SQL**—the most comprehensive WAN-based disaster recovery platform for SQL databases, including SQL server replication and SQL data recovery capabilities.
- WANSync Oracle**—a disaster recovery solution tailored to handle the specific nuances of Oracle replication and Oracle database disaster recovery.



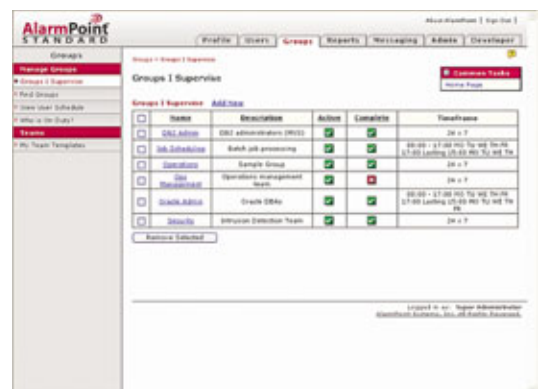
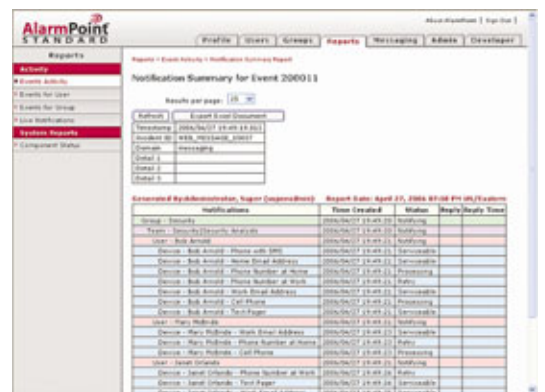
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**Manufacturer Presentation**

Software - Network & Systems Mgmt. Advertisement

## Notification & Resolution For SMBs & The Enterprise

Next-generation AlarmPoint is an enterprise-wide notification and event resolution platform that centralizes all system events and provides repeatable resolution processes. The AlarmPoint product suite is built to automate event resolution by managing the needs of today's mobile workforce. Designed to filter, suppress, and enrich important events, route those events to the right person on any communications device, and give the person the ability to solve, escalate, or enlist others to resolve, AlarmPoint bridges the gap between business-critical IT services and relevant human resources.



**Powerful system flexibility and capabilities**

- Role-based Web user interface
- Intelligent event management
- Event assignment and subscription
- AlarmPoint now on any OS platform
- Localized UI language options for 12 languages

**Discover the benefits of an easy-to-maintain event notification and resolution solution built for self-service automation.**

- Contact and device management
- Personnel and group scheduling
- Acknowledgement from Web or any other device
- Self-service event reporting



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Software - Network & Systems Mgmt. Advertisement

**NetScanTools Pro** is an ideal tool for the network security, administration, training, Internet forensics, and law enforcement fields.



**NetScanTools Pro** is an integrated collection of Internet information gathering utilities from Windows 2003/XP/2000. Research IP addresses, hostnames, domain names, email addresses, URLs--automatically or with manual tools.

**Multiple Solutions in One Package**

- Network Information Gathering, Reconnaissance and Discovery
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- Training: assists students in understanding various network protocols, methods of remote information gathering, and how networked devices expose information

**NetScanTools Pro Benefits**

- Save time on gathering information
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- Best Value at \$249 U.S. List (Full Download or CD-ROM)

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**Manufacturer Presentation**

Software - Storage Advertisement

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**StorageCraft ShadowProtect™ Server Edition will help end your backup headaches.**

StorageCraft ShadowProtect™ creates an exact online backup of your entire system, including the operating system, applications, configuration settings, and critical data, with zero downtime. ShadowProtect™ provides a simple view to restore or update files and folders to your existing backup image files. Save backups to any disk device, including USB, FireWire, attached storage devices such as NAS and SAN, and any network location.

**ShadowProtect™ Advantages:**

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- Back up only changed data for minimal storage consumption
- Backup image consolidation for simple management
- Schedule full or incremental backups
- Recover your servers remotely
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- Update point-in-time backups
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**Manufacturer Presentation**

Software - Physical Infrastructure Advertisement

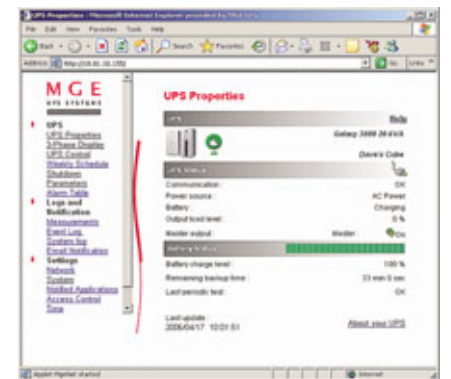
**MGE Simplifies Asset Management & Supervision Of UPS Systems With New Enterprise Power Management Software**

**MGE's Enterprise Power Manager v2** can substantially lower costs for supervising single- and three-phase networked UPS systems compared to using major network management system platforms. Enterprise Power Manager can carry out a scan for all the UPS systems from MGE, using both XML and SNMP protocols. The open architecture of EPM enables the discovery of UPSes from any other vendor supporting the standard UPS management information base (MIB). It also discovers and manages other critical power components, such as Power over Ethernet (PoE) midspans, Intelligent Power Distribution Units (PDUs), Source Transfer Switches (STS), and rack monitoring systems to give administrators comprehensive control of their protected infrastructure.

This new release of Enterprise Power Manager addresses the

special needs of complex three-phase power systems, with the ability to draw any type of power architecture, with multiple levels of redundancy, and view the actual power flows on the GUI.

Accessible from the Internet and any workstation using a standard Web browser, users can click a UPS in the presented diagram to obtain detailed information about the operating and configuration parameters in a dedicated window. Enterprise Power Manager uses Secure Sockets Layer (SSL) encryption along with several levels of passwords for complete security. In the event of a power emergency, alarms are centralized and transmitted by email or through Short Message Service (SMS). The systems' real-time logging of events and operations helps users to conduct preventive maintenance of their various UPSes.



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- Support for NetFlow V9
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**Manufacturer Presentation**

Software - Security Advertisement

## BitDefender 9 Professional Plus Now Includes Antispyware Protection!



BitDefender 9 Professional Plus integrates antivirus, antispyware, firewall, and antispam modules into one comprehensive security package, tailored to meet the needs of computer users worldwide.

**Antivirus + Antispyware NEW!**

The mission of this module is to ensure detection and removal of all viruses and spyware in the wild. BitDefender uses robust scan engines, certified by ICSA Labs, Virus Bulletin, Checkmark, CheckVir, and TÜV.

**Firewall**

The firewall module protects your data and your privacy by filtering the incoming and outgoing traffic, controlling cookies, and blocking malicious scripts and "XXX-dialer" type programs.

**Antispam**

Quite simply put, the BitDefender Antispam module deals with the problem of spam so you don't have to.



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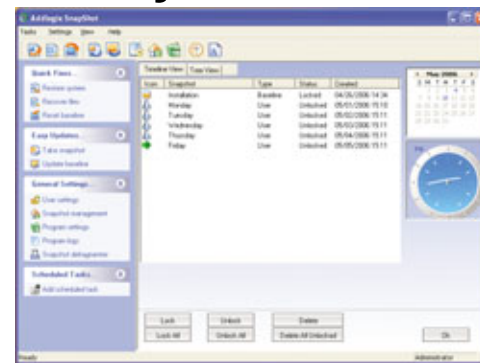
**Manufacturer Presentation**

Software - Storage Advertisement

## Addlogix SnapShot Disaster Recovery Software

**What is Addlogix SnapShot:**

It is the most powerful and most complete computer system and data maintenance software. It allows computer users to easily and quickly fix their computer. It can recover lost and/or corrupted files or restore an entirely crashed system to a stable working state in seconds.



**How it Works:** Addlogix

SnapShot allows users to create "snapshots" (maps of the hard disk sectors and the maps' indexing system) of the computer system and data at different times. Users can then select a specific snapshot to recover files or restore the entire system to. Theoretically, Addlogix SnapShot only takes 0.07% total hard disk space to create all the snapshots. However, each snapshot might contain different amount of user data; therefore each snapshot size might differ.

**Selective Data Recovery:** Addlogix SnapShot offers a unique feature that allows users to preserve or transfer files and data in the current snapshot to another snapshot during a restore process, and therefore not lose any data during the process. For example, users can create a snapshot of the current system before restoring to a selected snapshot. Or users can restore the system with the Advanced Data Synchronization option, which allows users to manually select the files they want to be transferred to the restored snapshot.

- Recover deleted, corrupted files
- Restore an earlier version of a file
- Restore the entire system to a clean state after virus attacks
- Restore crashed system to working state
- Reset publicly shared system to clean, preconfigured states after each session
- Remove unwanted software installations
- Back out a failed software deployment process
- Fix daily user or program problems
- Try out software products before actual deployments
- Complete removal of Trojan Horse or spyware



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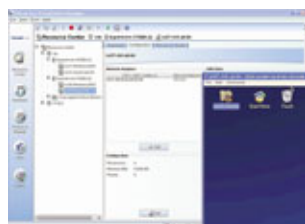
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### Wireless Management

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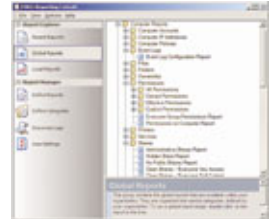
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**PROCESSOR**

## Manufacturer Presentation

Services - Storage Advertisement

# AmeriVault Managed Online Backup Service Better Than Ever

ServerVault is AmeriVault's premier D2D managed backup service that features enterprise backup without the use of agents or plug-ins. ServerVault delivers trusted data protection that automatically synchronizes data backup and offsite storage by simply installing a client and leveraging existing Internet connectivity.

### Still using tape?

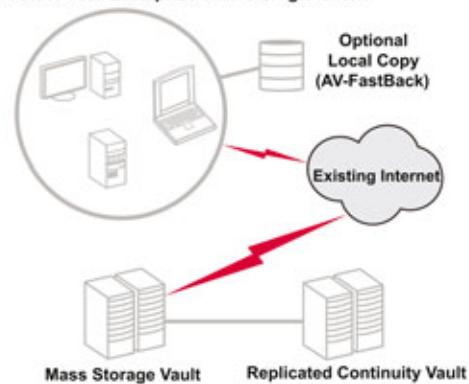
Imagine backups happening in 1/10 of the time, automatically getting secured in a Tier 1 data center, compressed, and encrypted, ready for immediate restore with a few mouse clicks.

### What about large restores?

AmeriVault deploys portable Mobile Vaults – disk devices that are shipped with large volumes of compressed data. They are highly reliable and plug right into a network for disk-to-disk recovery. Optionally, you may also choose to store a local D2D copy via AV-FastBack for LAN-speed restores or bare-metal recoveries.

### ServerVault Managed Online Data Backup & Recovery

Featuring block-level change, total automation and single instance  
Protect Your Enterprise With a Single Client



### Key Advantages & Business Benefits

- **Immediate Online Restores** – Save time for IT staff and end users
- **Central Management** – Consolidate and standardize internal and remote backup
- **Automatic Upgrades & Scaling** - We do the back-end, you can focus on other plans
- **Wide OS & DB Support** – All major OSes, Cluster, VMware, Mac, Lotus Notes
- **Expert Tech Support** – We help optimize service and expedite recovery
- **Assured Recovery** – Digital signature technology verifies data integrity

### About AmeriVault

- Nearly a decade in managed D2D service
- Replicated storage vaults
- SAS 70 certified
- Operating in five Tier-1 data centers
- Protecting data from 43 U.S. States



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