



EMTEC ADVISER

INFORMATION TECHNOLOGY SOLUTIONS AND STRATEGIES

Vol. 14 No. 3 May/June 2011

In This Issue...

Can Your Business Survive?

Disaster recovery planning is essential to the health of any business...pg. 4

Going Mobile: Latest solutions extend the benefits of desktop virtualization to laptops and other mobile devices...pg. 7

Call in the Experts: Staff augmentation allows organizations to access specific IT expertise...pg. 9

Seeing Green: Telepresence adoption can deliver significant financial and environmental rewards...pg. 14

Showing the Way

Emtec marshals unique resources to help client revive a stalled risk management project.

Risk is a word that typically carries negative connotations. However, progress always involves risk. As the old saying goes, sometimes you have to go out on a limb because that's where the fruit is.

Information Risk Management (IRM) frameworks are employed to help organizations recognize and remediate information or technology-based risks based on the potential for business impact. The idea is to protect the organization from excessive risk without creating barriers to innovation.

A major e-commerce payment processor with global operations recently saw the potential for using IRM to maintain innovation and collaboration while also ensuring compliance with a growing number of legal and regulatory mandates. However,

laying the groundwork for an IRM framework proved to be a daunting task that lay outside its core competencies.

The organization called on its longtime technology allies at Emtec to show them the way.

"We've had a long relationship with the CISO (chief information security officer), and they are a believer in our approach to security and to IRM in particular," said Michael Shortino, who served as Emtec's project manager for the engagement. "He brought us in to help them structure the program, with an initial focus on the policy and compliance aspects of their overall IRM strategy."

At a Standstill

Policy development is the cornerstone of an IRM program. Policies dictate how information flows across the various systems, devices, applications, users and locations in any complex business environment, as well as how that information is used and controlled. Policies must be detailed and coherent, yet flexible enough to apply over time to emerging technologies and changing legal and regulatory mandates.

Policies commonly address network access, log management, data encryption, identity protection, discovery and classification, access and authorization, data retention, compli-

ance reporting and many other key issues. Because policy development is such an important first step with such broad ramifications, there is a certain amount of pressure to get things right the first time. As a result, many organizations experience "paralysis by analysis" and waste significant time and effort trying to get off the starting blocks.

That was one of the problems facing this particular client.

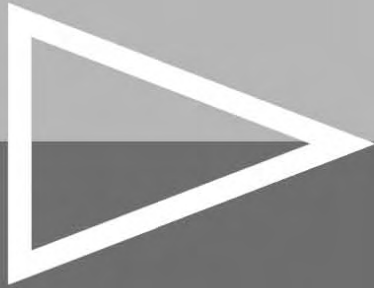
"They had a team in place and had published some policies, but they were having a hard time getting policies to the point where they could be actively utilized by the business and allow them to report on compliance from a legal and regulatory perspective," said Shortino. "They needed a strategy for how to create, implement and improve their policies over time."

Common Problem; Uncommon Solution

It was not a unique situation. Many other organizations seeking to implement a risk management program have similar issues. In fact, there is general agreement that the growing complexity of the regulatory landscape is causing organizations across all sectors to spend increasing amounts of time and resources on their compliance efforts. Although organizations are devoting more of their IT budgets

PRSRT STD
U.S. POSTAGE
PAID
Tulsa, OK
Permit No. 2146

The Adviser



KEY FEATURES

- » Remote hosted service, powered by industry-leading BMC Remedy ITSM technology
- » BMC handles ongoing administration, backup, and maintenance of the software and related infrastructure
- » You purchase the software *capability*, not a software license
- » Subscription-based, “pay-as-you-go” pricing
- » Architected with the BMC Atrium CMDB for centralized IT management
- » Ongoing administration, backup, and maintenance handled by BMC
- » Best-in-class consolidated service desk with ITIL and other best practices built-in
- » Trusted configuration data and service maps
- » At-a-glance analytics that reflect how effectively IT is supporting critical business applications and services
- » Alignment of the IT service management lifecycle to your business requirements
- » ITSM data migration — moves data from your current BMC Remedy or third-party applications to your new BMC Remedy ITSM On Demand solution

Navigate the crossroads of IT Service Management with BMC Remedy OnDemand

IT Service Management is the intersection of business and technology strategy with planning and operations to ensure that IT is focused on delivering business value. **BMC Remedy OnDemand** is a new SaaS-based offering that gives your organization access to all the benefits of BMC’s industry-leading IT service management solutions — without the costs and overhead associated with hosting and managing on-premises software. Using BMC Remedy OnDemand, you can phase in IT service management quickly and incrementally, beginning with one region or process and including others as needed. Implementation times are greatly accelerated through an established onboarding methodology and pre-configured data that reflects BMC’s ITIL-aligned, best-practice process models based on hundreds of successful implementations. This allows you to begin receiving a return on your BMC investment as soon as possible.

For more information, please contact
 Deanna Evers
 800-800-8894 x127897
 information@emtecinc.com
 WWW.EMTECINC.COM



Banking on Emtec

Helping financial institutions prepare for Dodd-Frank reforms

Designed to avert a repeat of the 2007-2008 meltdown in the financial markets, the Dodd-Frank Wall Street Reform and Consumer Protection Act is by far the most sweeping piece of regulatory reform legislation passed by Congress since the Great Depression. Think of it as Sarbanes-Oxley on steroids.

The 2,300-page bill dramatically modifies the roles and responsibilities of companies, boards of directors and shareholders, and requires companies to reexamine and refine their corporate governance practices. While Sarbanes-Oxley called for the government to pass 16 regulations, Dodd-Frank involves nearly 400 new regulations.

Just like Sarbanes-Oxley, the Dodd-Frank Act was not specifically written to address IT infrastructure issues but will nonetheless have far-reaching implications for the IT divisions of any organization in the financial industry. In particular, the Act's reporting and recordkeeping requirements will force firms to overhaul the way they identify, extract and analyze data.

To facilitate analytics and support systemic oversight, firms will need to implement data standards such as financial instrument and business entity identifiers, along with associated reference data and hierarchies to support the Act's reporting requirements. In addition, system safeguard requirements mandate that firms have disaster recovery, business continuity and data protection, security and archiving systems in place. Under Dodd-Frank, firms must maintain records for no less than five years.

These new requirements and compliance rules will no doubt create a strain on financial services firms that were already struggling to manage their IT infrastructure in a way that satisfies existing privacy and regulatory requirements. Unlike some previous legislation, however, Dodd-Frank's mandate for systemic reforms means that change initiatives won't be limited in scope to isolated departments, processes or applications. All will require organization-wide coordination, planning and communication.

It is a daunting task, and one that seems certain to far surpass Sarbanes-



Oxley in how it affects the IT operations in financial firms of every size. Complicating matters is the fact that Dodd-Frank compliance is likely to remain a moving target for years to come. According to a June 3, 2011 report by the independent, non-profit journalism group ProPublica, regulators have completed just 24 of the 387 rules the Act requires be drafted and implemented by at least 20 separate government agencies.

While it will be a year or more before the regulations required by Dodd-Frank will all be issued, the legislation's impact on the IT systems and processes of financial institutions is already being felt. Those who take a "wait and see" approach on the final requirements could find themselves too far behind to catch up.

With decades of experience, Emtec has a broad and deep understanding of what is required to meet government mandates and keep up with ever-changing regulatory compliance requirements. Our Auditing and Assessment services help clients understand their current IT environment with an objective, quantitative, third-party viewpoint.

Policy development is the cornerstone of any compliance effort, and Emtec's Policy Improvement experts can help you be prepared to make the necessary IT improvements and policy changes to keep up with the new Dodd-Frank requirements. The feature story in this edition highlights our agility and ability to bring the right resources to bear to help structure and improve IT policies to keep abreast of emerging technologies and changing legal and regulatory mandates.

Emtec can provide the guidance and support you need to address these challenges with confidence and efficiency, while also creating a value-based framework that allows you to seize business opportunities far into the future.

Cover Story

continued from page 1

to compliance, demands continue to outstrip resources. More than 90 percent of respondents in a recent Ovum survey said that compliance was taking more time and resources, while 96 percent said that the complexity of the regulatory landscape was increasing. There was less agreement about the way forward.

Emtec provided the guidance in formulating a clear path. With Emtec, they found a partner that could deliver an exceptional mix of resources and expertise. Emtec marshaled a team comprised of technical writers, policy documentation experts, application security experts, and a variety of IRM and compliance experts — all with a minimum of 15 years of industry experience. To provide executive-level guidance, Emtec also brought in the former CISO of a global financial services firm with direct experience implementing IRM policy and compliance controls that meet PCI Data Security Standards (PCI DSS) and Federal Financial Institutions Examination Council (FFIEC) guidelines.

One distinct aspect of the engagement is that Emtec took care to build a team of local resources, subject-matter experts from across its practice areas and industry renowned security experts. This enabled Emtec to provide the customer with constant face-to-face representation while also holding down costs.

"This isn't the typical model where your consultants travel in each week and then go home on the weekends," said Shortino. "We mix local and remote resources so that we can develop a framework as quickly as possible and deliver it at a relatively low cost."

Emtec helped the client create a library of policies and standards, based on templates and knowledge developed over numerous engagements. This library was aligned to an industry standard eGRC tool, that the client purchased, which can be used for ongoing policy life-cycle management and for compliance reporting.

Mind the Gaps

With resources in place, Emtec provided a detailed gap analysis between the client's current information policies and controls and IRM industry best practices. The gap analysis provided a road map for continued policy development, resource deployment and technology utilization necessary for a successful IRM implementation.

The client was so impressed that they actually retained key members of the Emtec team to consult on two other troublesome projects.

The first involves developing the metrics and measures required to report on key performance indicators related to their organization-wide security. This will allow for visibility into the security health of the organization.

The other is the development of an application inventory (what apps have been developed, who are the business owners, what other apps do they interact with) to gain a real understanding of what their critical applications are for security. Both of these projects are ongoing with metrics and measures recently extended.

"I think this client and the three engagements in particular show the real breadth of Emtec's capabilities and the depth of our resources both in-house and through industry-wide connections," said Shortino. "There's a tendency in this industry to be very insular in your thinking about who you can or can't use on an engagement. We don't have those kinds of boundaries at Emtec. We always look to use local resources when possible, but we have a large number of internal subject matter experts across the company and long-standing relationships that enable us to call on industry recognized specialists when necessary."

Although organizations are devoting more of their IT budgets to compliance, demands continue to outstrip resources. More than 90 percent of respondents in a recent Ovum survey said that compliance was taking more time and resources, while 96 percent said that the complexity of the regulatory landscape was increasing. There was less agreement about the way forward.

Can Your Business Survive?

Disaster recovery planning is essential to the health of any business.

Natural disasters, theft, cyberattacks, equipment failure and human error can strike at any time and without warning. When critical operational information is lost, organizations can expend valuable time and resources in an attempt to recover that information. In today's business environment, however, few businesses can survive days or weeks of downtime as they attempt to recover systems and data. That's one reason why 25 percent of businesses fail to reopen following a disaster, according to the Institute for Business and Home Safety.

Yet many small to midsize business (SMBs) do not understand the importance of disaster preparedness, according to Symantec's 2011 SMB Disaster Preparedness Survey. The survey, conducted in October and November 2010 by Applied Research, included more than 1,840 IT professionals responsible for computers, networks and technology resources at SMBs in 23 countries.

Half of the respondents said their organizations do not have a disaster plan in place. Forty-one percent said that it never occurred to them to put together a plan, and 40 percent stated that disaster preparedness is not a priority for them. The information that drives most SMBs is simply not protected.

"According to the research findings, SMBs still haven't recognized the tremendous impact a disaster can have on their businesses. Despite warnings, it seems like many still think it can't happen to them," said Bernard Laroche, senior director, SMB product marketing, Symantec. "Disasters happen and SMBs cannot afford to risk losing their information or — more importantly — their customers' critical information. Simple planning can enable SMBs to protect their information in the event of a disaster, which in turn will help them build trust with their customers."

Ignoring Warnings — Until Too Late

This lack of preparation is surprising given how many SMBs are at risk. Sixty-five percent of survey respondents live in regions susceptible to natural disasters. In the past 12 months, the typical SMB experienced six computer outages, with the leading causes being cyberattacks, power outages and natural disasters. The median cost of downtime for an SMB is \$12,500 per day.

Outages cause customers to leave — 54 percent of SMB customer respondents reported they have switched SMB vendors due to unreliable computing systems, a 12 percent increase over last year's survey. Forty-four percent of SMB customers surveyed stated that their SMB vendors have temporarily shut down due to a disaster. This affects their own businesses — when SMBs experience downtime, it costs their customers an average of \$10,000 per day. In addition to

direct financial costs, 29 percent of the customers surveyed lost "some" or "a lot" of important data as a result of disasters impacting their SMB vendors.

Government regulations such as HIPAA and Sarbanes-Oxley are also now mandating offsite backups and disaster recovery plans. Organizations that do not properly comply could face stiff penalties.

Half of SMBs said their organizations do not have a disaster plan in place. Forty-one percent said that it never occurred to them to put together a plan, and 40 percent stated that disaster preparedness is not a priority for them.

Despite all of these risk factors, SMBs are not being proactive when it comes to disaster recovery planning. Half of the SMBs that have implemented disaster preparedness plans did so *after* experiencing an outage and/or data loss. Fifty-two percent put together their plans within the last six months. However, only 28 percent have actually tested their recovery plans, which is a critical component of actually

being prepared for a potential disaster.

Getting Started Today

Even the most basic protections are lacking in many SMBs. Less than half of SMBs back up their data at least weekly and only 23 percent back up daily. Respondents also reported that a disaster would cause information loss. In fact, 44 percent of SMBs said they would lose at least 40 percent of their data in the event of a disaster.

These organizations are taking an unneeded risk. Thanks to disk-based solutions, backup and recovery processes are simpler and faster than ever before. Some of the latest backup devices can also function as virtual servers should an organization's primary server fail. Furthermore, virtualization and cloud-based solutions make it cost-effective to replicate backup data offsite without a large capital outlay for redundant equipment.

However, SMBs should not confuse data backup with disaster recovery planning. An effective disaster recovery plan should address not only backup and recovery procedures but offsite data storage and electronic and physical network access. It involves critical decisions that balance the cost of disaster recovery with the risk to the business.

A critical initial step is to list business functions, ranked in priority according to which must be back in operation first. Once these priorities are established, recovery time objectives (the allowable amount of downtime before the function is brought back online) and recovery point objectives (the allowable amount of data loss since the last backup) should be established for each function. Not everything needs protection — the key is to focus on core applications and data.

This winter's "Snowmageddon" remains fresh in our minds. Japan's devastating earthquake and tsunami still dominate the headlines. Hurricane season is just around the corner. It's time for SMBs to recognize that the next disaster could strike at any time, and only those with an effective disaster recovery plan will survive.

Tips for Developing a Disaster Recovery Plan

Thirty-six percent of SMBs intend to create a disaster preparedness plan in the future, according to the Symantec SMB Disaster Preparedness Survey. Symantec offers the following recommendations for organizations ready to get started:

- Don't wait until it's too late: It is critical that SMBs not wait until after a disaster to think about what they should have done to protect their information. Not only is downtime costly from a financial perspective, but it could mean the complete demise of the business. SMBs can't wait until it is too late, and need to begin mapping out a disaster preparedness plan today. A plan should include identification of key systems and data that is intrinsic to the running of the business. Basically, identify your critical resources.

- Protect information completely: To reduce the risk of losing critical business information, SMBs must implement the appropriate security and backup solutions to archive important files, such as customer records and financial information. Natural disasters, power outages and cyberattacks can all result in data and financial loss, so SMBs need to make sure important files are saved not only on an external hard drive and/or company network but in a safe, off-site location.

- Get employees involved: SMB employees play a key role in helping to prevent downtime, and should be educated on computer security best practices and what to do if information is accidentally deleted or cannot easily be found in their files. Since SMBs have limited resources, all employees should know how to retrieve the business's information in times of disaster.

- Test frequently: After a disaster hits is the worst time to learn that critical files were not backed up as planned. Regular disaster recovery testing is invaluable. Test your plan anytime anything changes in your environment.

- Review your plan: If frequent testing is not feasible due to resources and bandwidth, SMBs should at least review their disaster preparedness plan on a quarterly basis.



IBM InfoSphere

Turning information into understanding

IT departments continue to expend excessive time and effort searching, cleaning, transforming and pushing information across the enterprise organization — yet businesses seldom gain a complete understanding of data across departments and align that understanding with the enterprise business perspective.

IBM's InfoSphere product family changes that.

Built on an open architecture, InfoSphere solutions help profile, model, define, map and govern information that is spread across your enterprise, so you can deliver the right information, to the right people, at the right time.

Let Emtec's Information Management Team show you how to use IBM InfoSphere to glean valuable business insight from your data. Contact us today at **800-800-8894 x127897** or at **information@emtecinc.com**.



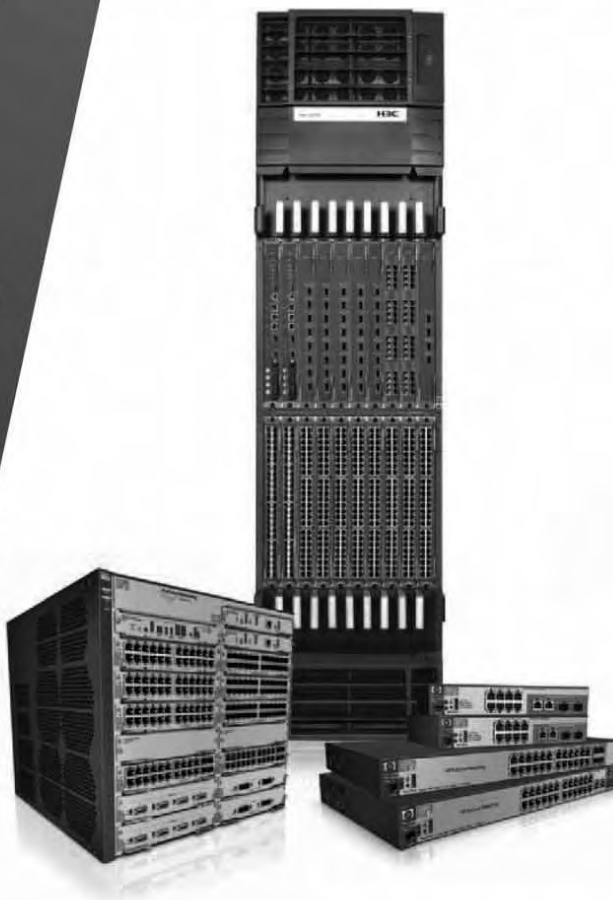
© Copyright IBM Corporation 2010. IBM-101





CHANGE

the rules of networking.



HP is changing the rules of networking with a full portfolio of high-performance, standards-based products, solutions, and services. These offerings are secure, energy-efficient, cost-saving, and developed specifically to simplify the complexities of networking for all customers, from the largest enterprise to the smallest emerging business.

Contact your Emtec representative to learn more.



For more information, please contact

Deanna Evers

800-800-8894 x127897

information@emtecinc.com

WWW.EMTECINC.COM

Going Mobile with Desktop Virtualization

The latest solutions extend the benefits of desktop virtualization to laptops and other mobile devices.

Laptop users now represent half of the workforce in many organizations — a testament to the growing mobility trend. Most mobile employees do the majority of their work on company-owned laptops managed by the IT department. In many companies, however, a growing number of end-users do their work on laptops that are not controlled by IT. This group includes contractors who bring their own devices to a project, as well as employees who use their own laptops at work as part of a bring-your-own-computer (BYOC) program.

These trends impose significant burdens on the IT department. Deploying and managing traditional desktops already represents one of the greatest challenges facing IT managers, and the job just keeps getting more difficult due to the constant need for application upgrades, operating system patches and antivirus updates. Mobility and the growing use of user-owned devices only exacerbate the problem. It's hard to manage equipment you don't own, and harder still to secure and support a diverse collection of hardware and software that literally changes every day.

Desktop virtualization can help. The latest desktop virtualization solutions support mobility by enabling access to virtual desktop images using any network-connected device. This shifts the IT support burden from the end-user's smartphone or tablet onto the server-based desktop image. Standards-based virtual desktop infrastructures (VDIs) and mobile devices with built-in VDI capabilities promise a new paradigm that enables mobility and BYOC programs while helping to relieve the IT support burden.

The Road to Success

Managing a typical end-user desktop can cost more than \$5,000 a year, which means companies literally spend billions of dollars trying to manage desktop PCs across far-flung enterprises. This cost can spiral out of control when mobile devices are added to the mix. Adoption of desktop virtualization solutions is being driven by the need to reduce this TCO equation as well as by the demand for a more flexible, independent and secure computing environment.

Desktop virtualization addresses some of the most troublesome problems facing IT today — desktop administration, data security and technology refresh costs — while satisfying workers' demands for mobility. IT is freed from the tasks of patching operating systems, installing and updating applications, and ensuring that data is protected on each and every desktop. Workers get to use their preferred devices.

With desktop virtualization, a server hosts an entire desktop environment specific to each user. Virtual machine images are built and stored on the server and delivered to end-users on demand. These images can be customized with the operating system, applications, security settings and other personalization features required by specific users.

With these virtual images stored in a central server, users have the ability to access their personalized computing environments as long as they have a

way of connecting to that central source. Organizations also have the ability to leverage public or private clouds, where key business applications can be accessed anytime, anywhere, from any network-connected device.

Paving the Way

Desktop virtualization and cloud computing platforms provide a framework for mobility by consolidating and centralizing complete desktop environments and introducing an element of flexibility to the delivery of technology services. Workers become more productive because they can get their full desktop experience from any location, and IT becomes more efficient by managing a large number of desktop environments from the data center.

For workers who use company-owned laptops, the best solution is a virtual desktop that runs directly on their laptop. This approach gives IT the central management and security benefits of server-hosted virtual desktops, while users gain the flexibility to be disconnected from the network that comes with traditional, locally installed desktops. And because the desktop runs in a local virtual machine at all times, users never have to go through the cumbersome, time-consuming process of "checking-out" their virtual desktop by downloading it from a central server each time they leave the office.

Employees and contractors who bring their own devices to work generally do not want IT installing software on their personal laptops, nor does IT want

to take on the cost and hassle of managing personal devices. IT's primary goal in these scenarios is to ensure these workers are productive, and that any corporate data on their personal laptops is secure at all times. For user-owned devices, the simplest solution is to deliver the corporate applications these users need as an on-demand service, while ensuring that any data created by those corporate apps is automatically encrypted.

Flexible Route

Smartphones, media tablets and other mobile devices have rapidly introduced new mobile applications into the IT world. IDC expects mobile computing to continue to explode in 2011, with shipments of application-capable, non-PC mobile devices outnumbering PC shipments within the next 18 months.

Many of these devices will support desktop virtualization — Cisco recently introduced a media tablet with built-in VDI support, and other device manufacturers have announced alliances with VDI vendors. Indeed, some experts see desktop virtualization as the next mobile device "killer app."

The ability to run secure, centrally managed virtual machines directly on end-user devices enables companies to adopt large-scale BYOC programs for mobile devices. Instead of receiving generic, standard-issue laptops from IT when they join the company, employees in a BYOC program can receive vouchers that can be applied to the purchase and support of any device they choose. At the same time, desktop virtualization makes it possible for IT to successfully support and manage the growing number of mobile devices.

Desktop Virtualization Goes to School

Desktop virtualization is seeing growing momentum in the classroom. Using desktop virtualization, kindergarten through 12th-grade students and teachers gain access to enhanced learning resources and digital content on school networks or remotely via the Internet.

Additionally, desktop virtualization supports the growing trend of students bringing their own laptops or network-connected devices to school by providing a secure virtual desktop that is managed and controlled by the school's IT department. As a result, desktop virtualization helps blend technology into school life, from lesson plans to homework, increasing time spent learning 21st-century skills versus managing technology.

For school IT administrators, desktop virtualization provides the ability to reduce cost and complexity by enabling them to manage virtual desktops centrally in the data center. Applications are installed, upgraded and patched once, then securely delivered over the network to any device, including PCs, Macs, laptops, tablets and thin clients. At the same time, the school's IT team can eliminate the

time previously required to manage and support individual desktop computers, and instead apply precious personnel and budget resources to other important projects.

Universities and school districts are using a combination of desktop virtualization and thin clients, zero clients and cloud PCs to enable the computing freedom that educators and students want, while delivering the control and total cost of ownership (TCO) advantages school IT administrators require. In addition, desktop virtualization offers schools the option of selecting energy-efficient alternatives to traditional PCs.

Desktop virtualization also allows for so-called shared-resource computing, in which each user has a zero-client device, monitor, keyboard and mouse and accesses personalized computer sessions through a shared computer. Shared-resource computing is popular with schools because it allows greater student access to technology without the need to support and maintain four-year upgrade cycles across large numbers of PCs.



BUILD

cloud services with HP CloudSystem



For more information, please contact Deanna Evers
800-800-8894 x127897
information@emtecinc.com
WWW.EMTECINC.COM

HP CloudSystem combines servers, storage, networking, and security together with automated system and hybrid service delivery management. The result is a complete cloud solution that's prepared to fulfill the promise of "cloud driven" services. Contact Emtec today to learn more.

© Copyright 2011 Hewlett-Packard Development Company, LP. HP-207

Call in the Experts

Staff augmentation allows organizations to access specific IT expertise while enabling in-house staff to concentrate on core business requirements.

Ramses the Great, perhaps the most illustrious of the ancient Egyptian pharaohs, knew a thing or two about core competencies. During his 67-year reign, Egypt enjoyed a period of great prosperity marked by the construction of many extraordinary temples, statues and obelisks that still stand some 3,500 years later.

When it came to military matters, however, Ramses understood his empire's limitations. In anticipation of war with Egypt's long-time nemesis, the Hittites, Ramses augmented his army with thousands of paid professional soldiers. It is history's first recorded use of mercenaries.

Ramses was simply acting on a principle that has become common in the modern business world: Focus on what you do best, and outsource the rest.

Outsourcing has played a key role in the operation of IT departments in recent years. IT outsourcing can take many forms, from utilizing service providers for day-to-day IT functions to bringing in teams to handle projects from start to finish. Many times, however, organizations simply lack specific skill sets, and need to supplement in-house staff with subject-matter experts. As a result, outsourcing in the form of staff augmentation has stood the test of time as a way to successfully combat these challenges. It helps fill skills gaps quickly and efficiently, and gives IT departments increased agility and budget flexibility.

Potent Weapon

The IT outsourcing concept has expanded in recent years to include not only consulting and supplemental staffing but managed services and cloud computing. Managed services providers take on the day-to-day management of the IT infrastructure through remote monitoring, proactive maintenance, help desk support and other services. Cloud computing involves the outsourcing of a device, application or even an entire infrastructure to a third-party provider who delivers it as a service on demand.

While these solutions have garnered a lot of attention, neither serves as a replacement for staff augmentation. Staff augmentation continues to play a unique role within the IT outsourcing paradigm.

Organizations that have made significant investments in the staff and tools needed for infrastructure management are not good candidates for managed services — yet they still may need staff augmentation from time to time. Cloud computing may be ideal for particular applications or services, but most organizations will still need to maintain on-premises IT resources for core business activities. All of these outsourcing solutions deliver benefits. It's a matter of choosing the right outsourcing "tool" to meet particular business requirements.

Managed services and cloud computing require organizations to restructure their operations to support a supplier-managed service delivery model. Staff augmentation, in contrast, injects business-specific inputs into an organization's existing processes. It provides rapid access to needed resources in a model that can scale up or down quickly with minimal impact on the existing IT organization.

Fighting Chance

As technology has become more complex, organizations have found it increasingly difficult to maintain all of the IT resources they need in-house. Even IT organizations with significant experience may find they need help with a particular problem or project, and budgeted projects sometimes languish for want of subject-matter expertise. Staff augmentation helps improve IT project outcomes while ensuring that core IT systems stay within internal control. It also helps them focus internal resources on activities related to their core mission and competitive strength.

Like other outsourcing solutions, staff augmentation reduces risk and increases certainty. IT issues can quickly become more difficult and expensive to resolve if in-house IT personnel are not familiar with the particular technology or aware of the latest tools and problem-solving methodologies. Staff augmentation helps organizations reduce these financial, technical and organiza-

tional risks by leveraging the subject-matter expert's know-how and dedicated capabilities. The best staff augmentation relationships emphasize shared risks and goals to ensure successful problem resolution or project outcome.

Thousands of years ago, Ramses the Great and his for-hire army defeated the Hittites and brought Egypt to the height of its imperial power. In doing so, he demonstrated that outsourcing difficult tasks to experts made good sense.

Faced with a tug-of-war between network requirements and budget constraints, more organizations are choosing to outsource all or part of their IT needs to a technology partner with specific expertise in the implementation, management and maintenance of network devices, servers, system software and more. It doesn't have to mean turning over the keys to the empire, however. Staff augmentation delivers the exact skills needed to give organizations of all sizes a fighting chance to achieve their goals.

Hiring Managers Struggle to Evaluate, Validate Candidates' IT Certifications

Professional certifications are viewed by most hiring managers as a high-value validation of IT skills. However, research from IT industry trade association CompTIA reveals that employers find it challenging to evaluate and validate IT credentials as they seek to fill high-tech jobs.

Nearly two-thirds (64 percent) of hiring managers rate IT certifications as having extremely high or high value in validating skills and expertise. But employers also expressed concerns about some aspects of using IT certifications in the hiring process. There is a perception among some hiring managers that the HR department does not have a solid understanding of IT certifications. Some also said verifying a job candidate's credentials can be a challenge due to the time involved (cited by 44 percent) and effort required (cited by 38 percent).

"The value of certifications can be enhanced in a number of ways," said Tim Herbert, vice president of research, CompTIA. "Stronger links with education, easier methods of verification, greater understanding of what IT certifications can and cannot do, and more organizational support for certifications as part of a professional development program all would be positive steps in this direction."

Experience, track record and accomplishments rank as the most important factors when evaluating job candidates, according to the study. But education and credentials such as certifications also rank high. For example, 86 percent of hiring managers indicate IT certifications are a high or medium priority during the candidate evaluation process.

"From the employer's perspective, top benefits of IT certification are validation of an individual's ability to understand new or complex technologies, higher productivity and more insightful problem solving," said Herbert.

The study suggests that certifications will become even more important as employers struggle to find individuals to fill job openings. Despite a virtual buyer's market for hiring, roughly eight in 10 HR executives in the U.S. said it's challenging to find the right candidates with the right skill sets to fill their openings. Many IT managers in the study share a similar view. For certain positions, the pool of available talent is not as deep as they would like it to be.

"Now more than ever there's little margin for error for making a bad hire," Herbert said. "In an environment of needing to do more with less, organizations cannot afford the time and cost of bringing on a new employee who cannot contribute immediately."

Tools of the Cybercrime Trade

Widely available and easy-to-use attack toolkits aid and abet cybercrime.

Cybercrime found its roots among technologically gifted malware authors who made a sport of compromising networks. Today, the lure of easy money and the ubiquity of the Internet have changed the face of cybercrime and the hackers behind it. Malware authors have created a shadowy underworld market for so-called attack toolkits.

Attack toolkits are programs that make it easy for novices and experts alike to launch widespread attacks against computer systems. They also provide the ability to customize threats in order to evade detection.

According to a recent study by Symantec, attack kits have become more accessible and easier to use, attracting traditional criminals who would otherwise lack the technical expertise for cybercrime. These kits are now being used in the majority of malicious Internet attacks, fueling a self-sustaining, profitable and increasingly organized global economy.

"In the past, hackers had to create their own threats from scratch. This complex process limited the number of attackers to a small pool of highly skilled cybercriminals," said Stephen Trilling, senior vice president, Symantec Security Technology and Response. "Today's attack toolkits make it relatively easy for even a malicious novice to launch a cyberattack. As a result, we expect to see even more criminal activity in this area and a higher likelihood that the average user will be victimized."

Going Concern

Symantec found that 61 percent of Web-based threat activity was attributable to attack kits. The most prevalent attack kits are MPack, Neosploit, ZeuS, Nukesplit P4ck and Phoenix.

ZeuS poses a serious threat to small businesses. The main objective of ZeuS is to steal bank account credentials; small businesses have few safeguards in place to guard their financial transactions, making them a prime target. In September 2010, authorities arrested a ring of cybercriminals who allegedly used a ZeuS botnet in the theft of more than \$70 million from online banking and trading accounts over an 18-month period.

As cyberattacks have become more profitable, the popularity of attack kits

has increased dramatically. This in turn has led to increasingly robust and sophisticated kits. These kits are now often sold on a subscription-based model with regular updates, components that extend capabilities, and support services. Cybercriminals routinely advertise installation services, rent limited access to kit consoles and use commercial antipiracy tools to prevent attackers from using the tools without paying.

Popularity and demand have driven up the cost of attack kits. WebAttacker, a popular attack toolkit, sold for just \$15 on the underground economy in 2006. In 2010, ZeuS 2.0 was advertised for up to \$8,000.

Mitigating the Threat

The speed at which new vulnerabilities and their exploits spread around the globe has increased due to innovations that attack kit developers have integrated into their products. Because attack kits are fairly easy to update, developers can quickly add code to exploit new vulnerabilities before potential victims apply necessary patches. As a result, some exploits are in the wild just days after the associated vulnerability becomes public.

Organizations and end-users should ensure that all software is up-to-date with vendor patches. Asset and patch management solutions may help ensure systems are compliant and deploy patches to systems that are not up-to-date. Organizations should also create policies to limit the use of browser software and browser plug-ins that are not required by users. This is especially prudent for ActiveX controls, which may be installed without the knowledge of the user.

Organizations can also benefit from using Web site reputation and IP black listing solutions to block outgoing access to sites that are known to host attack toolkits and associated threats. Antivirus and intrusion prevention systems can be deployed to detect and prevent exploitation of vulnerabilities and installation of malicious code.

Because attack kits are becoming easier to use, cybercrime is no longer limited to those with advanced programming skills. Participants now include a mix of individuals with computer skills and those with expertise in traditional criminal activities such as money laundering. Symantec expects that this much larger pool of criminals entering the space will lead to an increase in the number of attacks.

Software Projects Commonly Late

Only 51 percent of North American software developers say their latest project was delivered on time, while two-thirds of their projects came in within three weeks of target date, according to Evans Data's latest Global Development Survey. The survey polled more than 1,200 developers in North America, Asia Pacific (APAC) and Europe, the Middle East and Africa (EMEA).

APAC developers were slightly less likely to be on time, but 71 percent came in within three weeks, while European developers delivered only 36 percent of their projects on time, and less than 60 percent were delivered within three weeks of target dates. Those most likely to be on time were developers writing internal corporate apps for the enterprise.

The phase during which projects were most likely to be discontinued was the coding phase in both North America and EMEA. In the APAC region, projects were more likely to be abandoned during external beta testing.

"When a project is abandoned it's not necessarily a total waste," said Janel Garvin, CEO of Evans Data Corp. "Most were able to use some portion of the code in subsequent projects. What's interesting is that while developers love Agile, it was measurement-based models like Six Sigma or ITIL or projects using a waterfall model that were least likely to be discontinued."

DDoS Attacks on the Rise

Organizations experienced a steep increase in distributed denial-of-service (DDoS) attacks in the second half of 2010, according to a report from information security vendor Trustwave. DDoS attacks jumped 22 percent from the first half of 2010 to surpass SQL injection attacks as the number-one attack vector.

Trustwave said DDoS attacks were successful in disrupting commerce and bringing down Web sites of large businesses and organizations. The firm said the rise in these attacks is largely due to a lack of properly implemented anti-automation defenses to ensure application availability during such attacks.

The primary goal appeared to be aimed at causing downtime, according to SpiderLabs, Trustwave's security research and testing group. Incidents that resulted in some kind of application downtime jumped 21 percent to account for 33 percent of all attacks, the report found. Defacement and leakage of information were the second and third most popular effects.

The firm said most businesses wrongly assume that network hardware will stop DDoS attacks, or believe their sites will not be targeted by such attacks. But the increase in this attack vector indicates that businesses, both large and small, should test their Web site limitations to better understand how their applications will respond to such an attack. As hackers shift from attacking the network to attacking applications, Web application firewalls can help businesses monitor application performance metrics.

Analyst Expects Jump in IT Spending

A new survey points to continued stabilization in IT spending, with 51 percent of respondents planning to increase their IT budgets over 2010 levels and another 32 percent reporting that they expect 2011 spending to be the same as last year. The 2011 IT Spending Intentions Survey from Enterprise Strategy Group also documents a consistent three-year decline in the number of organizations planning to decrease budgets on a year-over-year basis.

The survey was based on data gathered from 611 North American and Western European senior IT professionals from midmarket (100 to 999 employees) and enterprise-class (1,000 employees or more) organizations.

IT managers said spending priorities are increasing efficiency, risk mitigation and data management. However, the most significant change in IT priorities compared to the 2010 survey is the increased importance attached to cloud computing services. The use of cloud infrastructure has increased from number 22 to number 12 on respondents' list of IT priorities. The increased use of Software-as-a-Service (SaaS) for application delivery has risen from number 24 to number 14.

"ESG has witnessed a steady three-year increase in organizations looking to increase their use of cloud computing as a more cost-effective alternative to traditional IT delivery methods," said John McKnight, ESG VP of Research. "Indeed, companies looking to reduce IT costs are now more likely to be considering cloud services than they are to be reducing IT headcount, a complete reversal of organizational priorities from just two years ago, when shedding staff was one of the first places CIOs looked to trim costs."

We Deliver IT



From A – Z

Emtec responds to the unique IT needs of students, educators, and administrators with a full suite of solutions, services and technologies geared to the special requirements of the education environment. Find out more about how Emtec can transform IT in your school district to support learning and streamline operations by visiting us online, anytime.



www.emtecinc.com

800-800-8894 x127897

© Copyright 2011 Emtec Inc. All rights reserved. Emtec and the Emtec logo are trademarks or registered trademarks of Emtec Inc.

More Organizations Are Buying BI

It's been said that many organizations are drowning in information but starving for knowledge. Organizations today collect enormous amounts of data from numerous sources, but the problem is how to turn that information into insight.

Business intelligence (BI) software is designed to give an organization the ability to extract meaning from its data. With these tools, companies can mine the raw data they obtain from multiple sources to expose patterns of customer behavior and make informed business decisions. This insight into market trends and customer habits can help companies identify cost-cutting ideas, uncover new business opportunities, develop crossover sales leads, react quickly to retail demand, optimize prices and more.

While older BI tools were overly complex and usually required assistance from the IT department, the latest BI software gives everyone in the organization access to simple tools that allow them to utilize analytics, alerts and feedback mechanisms to improve individual performance.

The worldwide market for BI software is forecast to grow 9.7 percent to reach \$10.8 billion in 2011, according to Gartner's latest enterprise software forecast. Growth is expected to slow slightly over the forecast period to 2014, but remain in the high single digits. Gartner's view is that the market for BI platforms will remain one of the fastest-growing software markets despite sluggish economic growth in most regions.

Smarter Solutions

Organizations continue to turn to BI as a vital tool for smarter, more agile and efficient business. BI ranked number five on the list of the top 10 technology priorities for CIOs in 2011, according to Gartner's annual global CIO survey.

"It's a sign of the strategic importance of BI that investment remains strong," said Ian Bertram, managing vice president at Gartner. "This market segment has remained strong because the dominant vendors continued to put BI, analytics and performance management at the center of their messaging, while end-user organizations largely

continued their BI projects, hoping that resulting transparency and insight will enable them to cut costs and improve productivity and agility down the line."

Bertram said the demand side of the BI platform market in 2010 was defined by an intensified struggle between business users' need for ease of use and flexibility on the one hand, and IT's need for standards and control on the other.

"With 'ease of use' now surpassing 'functionality' for the first time as the dominant BI platform-buying criterion, vocal, demanding and influential business users are increasingly driving BI purchasing decisions, most often choosing easier-to-use data discovery tools over traditional BI platforms — with or without IT's consent," said Bertram.

Three Important Trends

Gartner has identified three major factors that continue to expand use and drive BI platform revenue growth:

Consumerization of BI — BI tools must be simple, mobile and "fun" in order to expand use and value. Business users are demanding the same experience from their BI tools that they have come to enjoy with their personal tools. The need for more intuitive and interactive BI tools and applications extends to users on the go, but the vast majority of organizations have yet to embrace mobile BI. This is set to change very quickly with the proliferation of Apple's iPhone and iPad products.

Support for Extreme Data Performance, Emerging Data Sources — Capabilities that enable the analysis of large, volatile and diverse data will open up possibilities for a broad range of new, high-value BI applications and will be another driver of BI growth. This includes in-memory technology and social and content analytics. Combining these capabilities with support for extreme data volumes and consumer-oriented tools opens up possibilities for a broad range of new, high-value BI applications and will be another driver of growth.

BI as a Decision Platform — Gartner's user surveys show that "improved decision making" is the top driver of BI purchases. Capabilities that will evolve BI from an information delivery system to a decision platform will increase the value of BI and drive its growth.

Exec: Inconsistent IT Hurts Healthcare

The lack of common interoperability standards and inconsistent approaches to security, privacy and trust are perpetuating an antiquated U.S. healthcare delivery system that has been largely unable to benefit from the widespread adoption of IT, Verizon's top security and healthcare executive says.

In a recent speech at the Health Information Management Systems Society annual conference, Dr. Peter Tippett, VP of Security and Industry Solutions for Verizon, called for the development of "simple, commonsense approaches to data security and interoperability" to help expand access to quality care, control costs and improve patient outcomes.

Tippett outlined four key areas that he said will serve as the foundation for the future transformation of the healthcare system:

Built-in Security. The ability to share information in a secure and trusted manner is vital. To be effective, security compliance programs should be intuitive, easy-to-use and uniform across the industry.

Support for Structured and Unstructured Data. Due to a lack of common standards for its use and storage, data often remains in separate files rather than being combined to provide a holistic patient view. When data can be easily shared among providers it will help reduce medical errors and enable informatics and analytics to help improve treatment plans and patient outcomes.

High-IQ Networks. Pervasive and interconnected IP and wireless networks are the essential platforms to connect providers to foster innovation.

Simplification. Solutions must be affordable, consistent and easy to use. Leveraging current systems and data is an important first step and is essential for promoting usability and driving benefits to provide a solid foundation for future enhancements.

CIOs Expect Increased Tablet Use

With the business world being reshaped by mobile technologies, companies are moving to embrace the highly portable, Internet-linked tablet computer. Nearly half of CIOs in a recent survey said their companies will increase the use of tablets in the next two years.

The survey by Robert Half Technology was conducted by an independent research firm and is based on telephone interviews with more than 1,400 CIOs from companies across the U.S. with 100 or more employees.

CIOs were asked if they believed their companies' use of tablet computers would increase or decrease in the next two years. Forty-nine percent said it would increase, 2 percent said it would decrease, 40 percent said it would remain the same and 9 percent either did not know or did not answer.

"With more companies moving to Internet-based file sharing and data storage, along with an emphasis on portability and mobile productivity, it's no surprise CIOs anticipate wider use of tablet computers," said John Reed, executive director of Robert Half Technology. "The challenge for IT departments will be providing adequate support and security."

Flex-Work Options Increasing

Eighty-five percent of U.S. companies now offer their staff some form of flexible working options, according to a new report from Regus, a global provider of flexible workplace solutions. The majority of those same companies are finding that flexible working is bringing them significant benefits, including reduced overhead expenses, improved staff productivity and work-life balance. Additionally, 62 percent of U.S. businesses believe flexible working costs less than fixed-office working.

"It's truly good news for everyone that flexible work has become the norm. Everyone benefits from this, not just the employers and employees, but families, wider society and even the environment," said Sande Goltart, regional vice president for Regus. "For the first time, a global report, based on 17,000 businesses across 80 countries, provides conclusive statistical evidence on the availability of flexible working and the value derived from associated benefits."

Seventy-five percent of businesses offering flexible working report their staff has significantly better work-life balance, improving satisfaction and motivation. In addition, half believe flexible working improves staff productivity, and 25 percent say leveraging a flexible workplace helps them scale quickly to cope with rapid growth. More than 30 percent of flexible-working businesses also feel their policy helps them access a wider talent pool.

Creating a Connected Healthcare Community



- Critical communications integration
- Real-time, secure collaboration
- Device-independent communications
- Borderless patient care via mobility and video solutions
- Security solutions for people, assets and information

For more information, please contact
Deanna Evers
800-800-8805 x127897
information@emtecinc.com
WWW.EMTECINC.COM



ALC-03

Seeing Green

Study says increasing telepresence adoption to deliver significant financial and environmental rewards.

Telepresence is good and good for you, according to a recent report on the potential economic and environmental impact of the technology.

A new Carbon Disclosure Project (CDP) study produced by independent analyst firm Verdantix found that organizations in both the U.S. and the U.K. will achieve almost \$19 billion in financial benefits from deploying nearly 10,000 telepresence suites between 2010 and 2020. Over that 10-year period, the deployment of telepresence technology will also deliver cumulative CO₂ emissions reductions of nearly 5.5 million metric tons — equivalent to taking 1 million passenger vehicles off the road. Telepresence technologies incorporate high-definition audio and video along with very high bandwidth to create an immersive meeting experience.

“Companies that invest in carbon-cutting technologies and reengineer the way they do business will not only be better placed to succeed as we transition

to a low-carbon economy but can experience considerable business benefits during this transition,” said Carbon Disclosure Project CEO Paul Dickinson. “This CDP report produced by Verdantix clarifies the economy-wide transformational potential of telepresence deployment in line with 2020 climate-change policy targets.”

The analysis is based on detailed case study evidence from interviews with Global 500 companies such as Accenture, Aviva, Deutsche Bank and PepsiCo that are early adopters of telepresence suites. The Verdantix analyst team applied an innovation diffusion algorithm to forecast telepresence adoption by 2,653 U.S. firms and 457 U.K. firms with annual revenues greater than \$1 billion, and studied the potential economic and environmental impact of increasing adoption.

“By substituting some business travel for telepresence meetings, large firms will achieve substantial financial benefits and add impetus to corporate

sustainability commitments to cut back on CO₂ emissions,” said Rodolphe d’Arjuzon, the Verdantix director who led the research. “Our forecasting model is based on an individual business implementing four telepresence suites with an upfront investment cost of \$600,000 and annual operating costs of \$85,000, which includes bandwidth, room usage, electricity costs and system support services. Cost savings from projected reductions in air and road travel plus productivity gains from time saved mean firms achieve a payback within 15 months.”

Conferencing Takes Off

The unique benefits offered by online conferencing were dramatically highlighted in April 2010 when an Icelandic volcano grounded flights in and out of Europe. Officials from several providers of telepresence and videoconferencing solutions reported significant spikes in usage during the six-day period when more than 17,000 flights were disrupted.

“The effectiveness of the latest technologies and the impact of the global economic downturn are impelling businesses to reassess visual collaboration such as video telephony, videoconferencing and telepresence as viable solutions to facilitate reduced operations costs and create new sources of productivity. The volcano ash clouds from Iceland are just the latest in a long line of issues that have impacted business travel,” said Frost & Sullivan principal analyst Dominic Dodd. “Telepresence in particular has played a pivotal role over the last two to three years in helping build greater awareness and in refocusing executive-level attention on visual collaboration.”

Frost & Sullivan says rapid development in the capabilities of videoconferencing systems and Internet Protocol (IP) networks over the last three years is driving increased sales and creating further opportunities for service providers and systems integrators.

Seeing is Believing

The high-tech market research firm places the value of the telepresence market at \$396.2 million for 2009, and forecasts this to reach \$825.9 million in 2015. The visual collaboration endpoints covered in the company’s research include both ready-built telepresence room solutions and kits of telepresence component parts that are

used by third parties to construct customized solutions.

Telepresence offers a unique proposition that can deliver effective and reliable visual communications. Its development and growth in popularity parallels advancements in other forms of visual collaboration, notably the rapid emergence of high-definition videoconferencing and managed services.

Visual collaboration is also an essential component of unified communications (UC). The technological and industrial structural changes, which are still playing out, are part of a process of fully integrating all forms of visual collaboration into the wider UC portfolio of products and services.

Proceed with Caution

Despite rising awareness of the benefits offered by immersive telepresence solutions, prospective buyers have moved cautiously. The majority of telepresence systems continue to require significant network bandwidth and quality of service management to perform up to their maximum potential. Globally, reasonably priced and accessible network and managed services remain patchy.

“There is growing opportunity for visual collaboration in general — being driven by an irresistible combination of technological developments and increasing customer need,” said Dodd. “While telepresence can uniquely offer a number of attractive customer benefits, there are concerns about the cost and availability of the network required to support it, and also how effectively it may work with other parts of a customer’s video estates.”

Visual collaboration endpoints are expected to fare well in the long term. Although the product format by which immersive telepresence is delivered is likely to change, the overall demand for its unique features and benefits will continue to grow. The emerging custom telepresence solutions segment is expected to gain further importance over the next three to four years with several opportunities for systems integrators, visual collaboration applications developers and managed services providers.

“While the latest research indicates that the market for today’s ready-built systems will ultimately reach its upper limit within the next five years, it also shows how demand for the immersive experience can accelerate as it is fed by other product sets such as high-definition videoconferencing and custom telepresence solutions,” Dodd said.

Subscribe Today!

This copy of the Adviser was provided by Emtec Inc.

To receive your FREE subscription, sign up online at www.emtecinc.com/adviser or send in this coupon.

New Subscription Change of Address

Name _____

Title _____

Company _____

Address _____

City _____ State _____

Zip _____

Phone _____ Fax _____

E-mail _____

Please print clearly. Send to Adventure Publishing, 4941 S. 78th E. Ave., Tulsa, OK 74145. Fax (918) 270-7134.

Copyright © 2011 CMS Special Interest Publications. All rights reserved.

Editorial Correspondence:

4941 S. 78th E. Ave., Tulsa, OK 74145

Phone (800) 726-7667 • Fax (918) 270-7134

Change of Address: Send updated address label information to above address.

Some parts of this publication may be reprinted or reproduced in nonprofit or internal-use publications with advance written permission.

The Adviser is published monthly by CMS Special Interest Publications. Printed in the U.S.A.

Product names may be trademarks of their respective companies.

6/11

Antidote for DNS Cache Poisoning

Given the Internet's pervasive role in daily life, finding viable solutions to cybercrime is imperative. Many security experts consider the Domain Name System Security Extensions (DNSSEC) to be an essential tool in "sealing" vulnerabilities in the Domain Name System (DNS).

The DNS is where all Internet addresses are stored. When a user types a URL into a browser, a DNS resolver checks the Internet for the IP address of that URL, generally accepting the first response. In addition to sending the user to that site, DNS caches that information for a period of time, so that the site is immediately delivered upon the next request. This system works seamlessly up to a trillion times each day — unless a cybercriminal intercepts the process.

DNSSEC effectively foils attackers' attempts to direct users to malicious sites through an automated trust infrastructure using public key cryptography. By applying digital signatures to DNS data, DNSSEC enables systems to authenticate the origin of DNS information and verify its integrity as it moves across the Internet. DNS resolvers can verify that data originated from authoritative sources, and that responses are not modified in flight.

Foiling Attacks

DNSSEC does not ensure confidentiality of data or protect against denial of service or other types of attacks. However, it will eventually allow Internet users to know with certainty that they have been directed to the Web site they intended to reach. Specifically, DNSSEC protects against DNS cache poisoning and man-in-the-middle attacks.

DNS cache poisoning occurs when a malicious system responds to the DNS query first with false information, sending the user to the bad link and caching the fake address. If the request came from a service provider, thousands of people can be affected when the false information is sent on to the provider's customers.

In a man-in-the-middle attack, a criminal intercepts one-to-one communications then continues to communicate with the second party while masquerading as the first. For instance, a criminal could divert an online communication from a customer to a bank and then, pretending to be the customer, use the information to empty the victim's bank account.

"DNSSEC is not a silver bullet to stop every cyber crime. But it will have a real and positive impact on the security of the Internet. This is one important step forward in the fight against cybercrime," said Rod Beckstrom, president and CEO of the Internet Corporation for Assigned Names and Numbers (ICANN).

Slow Uptake

Because DNSSEC establishes trust through authentication, its effectiveness depends to some degree upon widespread adoption. In 2008, the Office of Management and Budget stated that the federal government would deploy DNSSEC to the .gov top-level domain (TLD) by January 2009, and mandated that all federal agencies deploy DNSSEC in their information systems by December 31, 2009. More than 50 TLDs for specific countries have also been DNSSEC-signed.

ICANN, Verisign and the U.S. Department of Commerce "signed the root zone" (the highest level in the DNS hierarchy) in July 2010, and the .edu, .org and .net TLDs became DNSSEC operational in 2010. The .com TLD is scheduled to be signed this year.

However, progress has been slower farther down the chain. A June 2010 Forrester Research report sponsored by Verisign found that there remain technical concerns, including how organizations will sign their DNS data and manage the public/private keys. DNSSEC creates larger DNS packets that some older networking equipment cannot accommodate. Then there's the learning curve — a November 2010 survey by IDG Research found that only 50 percent of security and technology professionals were even familiar with DNSSEC.

"DNSSEC adoption has been hampered by concerns over the operational complexity with provisioning encryption keys and the processing overhead required to sign DNS information," said Jon Oltsik, senior analyst at Enterprise Strategy Group. "Additionally, customers haven't had a seamless DNSSEC architecture option for global server load balancing and standard DNS, so they've had to choose between either deploying reliable intelligent DNS systems or securing their DNS infrastructure with DNSSEC."

Facebook Activity Can Cause Stress

The more Facebook "friends" you have, the more likely you are to feel stressed out by the social networking site, according to a new study by Scottish researchers. Psychologists from Edinburgh Napier University quizzed about 200 students on their use of the phenomenally successful site, which now has more than 500 million users worldwide. They concluded that for a significant number of users the negative effects of Facebook outweighed the benefits of staying in touch with friends and family.

Twelve percent of respondents said that Facebook made them feel anxious. These respondents had an average of 117 "friends" each. The remaining 88 percent of respondents, who said that Facebook did not make them feel anxious, had an average of 75 "friends" each.

Dr. Kathy Charles, who led the study, said many of the subjects said they were anxious about withdrawing from the site for fear of missing important social information or offending contacts.

"Like gambling, Facebook keeps users in a neurotic limbo, not knowing whether they should hang on in there just in case they miss out on something good," said Charles.

She said other causes of tension included purging unwanted contacts, the pressure to be inventive and entertaining, and having to use appropriate etiquette for different types of friends.

Radar for Your Car?

Automobile blind spot detection (BSD) systems, which make up for gaps in the driver's field of vision using sophisticated technology, will be standard in a quarter of cars sold worldwide by 2016, according to new research. The systems will make their way into 20 million vehicles every year within the next five years, with a worldwide market value of over \$12 billion, according to ABI Research.

BSD systems first began to appear in top-of-the-line consumer vehicles around 2005, with Volvo leading the way. Today, they are included on some models such as the Ford Focus and Mercedes-Benz C-Class, but are rarely standard features.

"Blind spot detection has struggled for recognition in its early days as a standalone application," said principal analyst David Alexander, "perhaps because it has been unfairly classified as a feature for less-competent drivers. But now the feature is becoming more popular because it's now better understood that the experienced driver can activate the turn signal to execute an extra check before changing lanes."

More recently, with the introduction of radar-based systems, additional functionality has made the BSD option even more attractive. The emergence of cross traffic alert is probably the most significant event, because it offers the driver information about local traffic that is not available elsewhere.

BSD can also be linked to lane-keeping systems that can provide steering or individual wheel braking to help the driver stay in lane. By bundling the two systems together, as many manufacturers are starting to, drivers get machine vision to help them stay in lane and be safer when deciding to move out of the current lane.

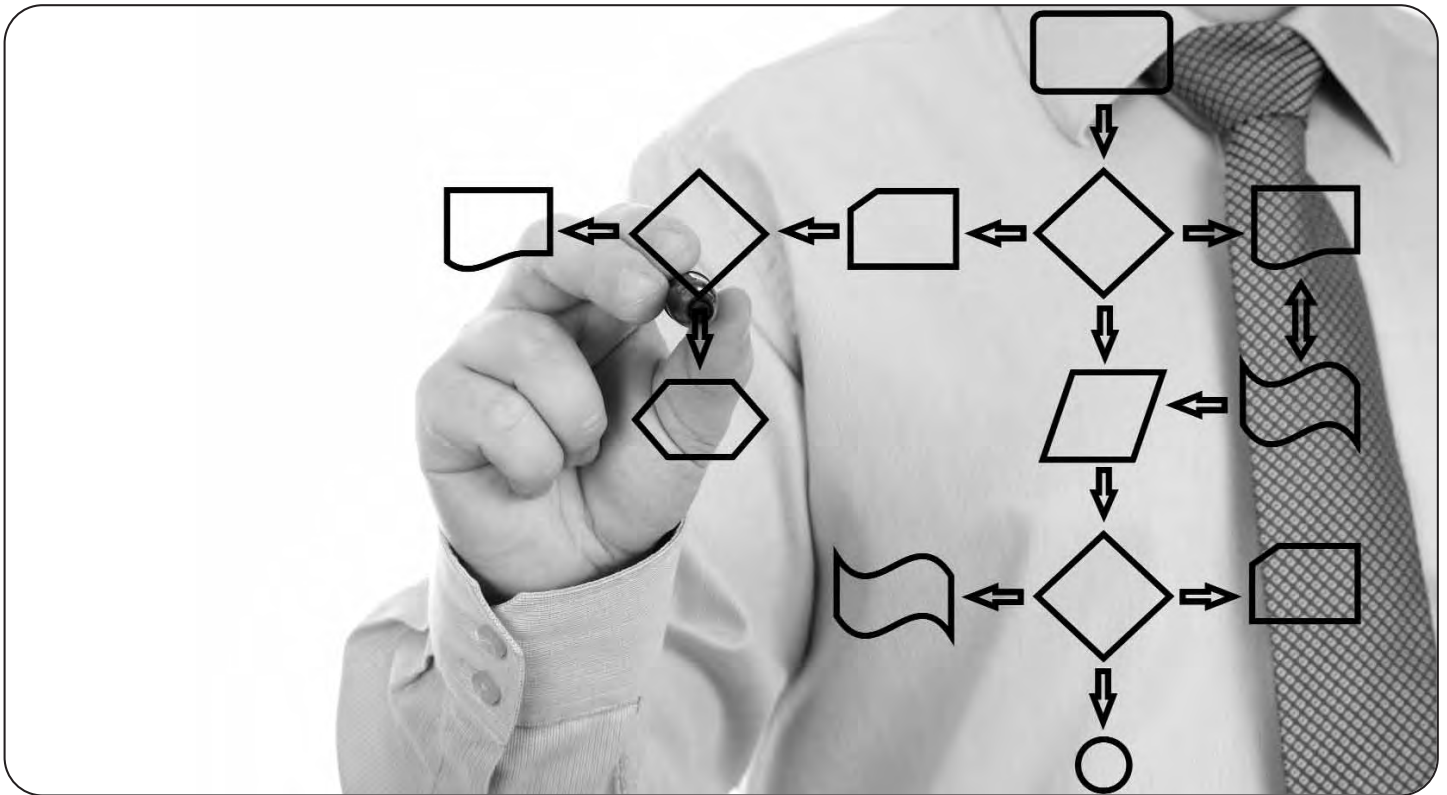
Game System Used in Medical Research

At The University of Minnesota reportedly has saved more than \$100,000 in research funds by using the Xbox 360 Kinect to aid in research on the diagnoses of mental disorders in children. The Institute of Child Development, the University of Minnesota Medical School and the College of Science and Engineering are exploring the use of technology to diagnose children who show symptoms of an array of mental disorders including obsessive-compulsive disorder and attention deficit disorder, according to the press release.

The University's Center for Distributed Robotics developed a video monitoring system that uses several Kinect cameras mounted around a room. The cameras take video of children playing and send the video feed to software that sorts the data and presents it to doctors.

"As a doctor, you don't have tangible data," professor Nikolaos Papanikolopoulos, told the Minnesota Daily. "We try to provide the tools in order to back up claims of a mental disorder."

The Kinect replaces what would have been a more than \$100,000 system designed to do essentially the same thing. That system would have also required attaching sensors to children, rather than monitoring them mostly unnoticed.



TRANSFORMING IT

Emtec, Inc. is an integrated IT solutions, services and systems provider driven by a singular mission: to help major organizations across a broad range of sectors realize fast and full return on their IT investments.

Our solutions offerings span the entire IT lifecycle, from IT Consulting and Application Services to Infrastructure Services and Cloud Solutions.

In short, we help you plan, procure, integrate, implement, manage and maintain IT to align with your business goals. We do that by combining the latest knowledge with proven IT products and systems from world-leading partners – and we have the consulting, engineering and technical expertise, resources, and personnel to efficiently handle projects of any size and complexity.

Our commitment to delivering IT solutions, systems and services of the highest standard is reflected in our ISO 9001 certification. Let Emtec help you transform IT into an investment that returns true value to your organization.



LEARN MORE ABOUT OUR EXPANDED OFFERINGS AT:

WWW.EMTECINC.COM
WWW.EMTECFEDERAL.COM

OR CALL US AT:

800-800-8894 X127897

IT CONSULTING

- ◆ IT Strategy & Planning
- ◆ IT Performance & Governance
- ◆ IT Process Improvement
- ◆ IT Security & Compliance

APPLICATION SERVICES

- ◆ Development, Maintenance & Support
- ◆ Package Implementation
- ◆ Validation & Verification
- ◆ Information Management

INFRASTRUCTURE SERVICES

- ◆ IT Service Management
- ◆ Procurement & Lifecycle Services
- ◆ Infrastructure Optimization
- ◆ Managed Services

CLOUD SOLUTIONS

- ◆ Cloud Strategy
- ◆ Cloud Development
- ◆ Infrastructure Optimization