

SaaS Solutions for Remote Systems Management

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Getting “SaaS-y” with IT Systems Management

New on-demand services offer enterprise applications without costly infrastructure.

BY SANDRA GITTLEN

IT teams have traditionally thought of Software as a Service (SaaS) as a way to speed delivery of business applications to users without expensive infrastructure costs. But a new class of on-demand services is emerging that enables IT organizations to take advantage of SaaS benefits for their own e-mail and systems management needs such as compliance, security and business continuity.

SaaS services aim to take the pressure off IT teams to manage the network in-house and cost-justify staffing levels. The SaaS Web-based delivery mode enables organizations to “rent” applications for a monthly fee rather than absorb the “cradle-to-grave” expenses involved with applications such as licensing, infrastructure, quality assurance and ongoing maintenance.

Studies have shown that organizations have taken to the SaaS model for common business applications such as sales force automation and customer relationship management. A recent Kelton Research study of business leaders at 101 Fortune 500 and other large enterprises, commissioned by Acumen Solutions Inc., found that 73% of large companies have either

already adopted SaaS solutions or plan to within the next 18 months.¹

“SaaS adoption is maturing and finally being baked into IT spending, IT roadmaps and overall enterprise architectures,” says Shally Stanley, managing director of global services at Acumen Solutions, a business and technology consulting firm with offices throughout the U.S. and in Europe.

SaaS early adopters say they enjoy the flexibility, scalability and rapid deployment—often within hours instead of months—that SaaS solutions can offer. They also like the fact that they can expand and adjust services, such as instantly adding feature sets, as business needs change.

Target: IT

In the past, IT teams had been hesitant to employ on-demand services for anything more critical than mainstream business applications because they were worried that data would be vulnerable outside of the corporate firewall. But that mindset is quickly changing.

Services have matured, and there is an increased demand for IT teams to speed application deployments, lower the TCO of applications, and better secure an increasingly distributed and mobile workforce.

Experts say that SaaS is the way to get there and that IT teams should give SaaS a second look. According to an August 2007 Gartner report, SaaS is set to outpace the enterprise application software market. Gartner predicts SaaS will have a compound annual growth rate of 22.1% through 2011 for the aggregate enterprise application software markets,

1. *On Demand Is In Demand: SaaS Adoption Accelerates Among Large Enterprises*, Acumen Solutions, May 2008

more than double the growth rate for total enterprise software.²

This rise will be fueled by innovations from SaaS vendors that target the requirements of IT organizations and alleviate the need for lengthy, highly customized and complex systems management deployments. For instance, IT teams can use on-demand services to automate and simplify tasks such as remote desktop management; e-mail backup, archiving and continuity; laptop data encryption; and securing data on lost or stolen laptops. (For a look at Dell's portfolio of SaaS services to simplify IT, see page 10).

In addition, IT teams can take advantage of the experience SaaS vendors have in deploying applications to other customers as well as virtually instant access to new feature sets.

Rescuing IT from Compliance

SaaS solutions have been key in helping IT teams keep up with compliance standards. With regulatory demands increasing and constantly changing, SaaS has helped IT teams find success in this area. Both the government and private sector have strict requirements regarding data protection and e-mail retention. These mandates are becoming more challenging with an increasingly distributed and mobile workforce. IT teams are struggling to deploy client/server applications that enable them to protect corporate data residing on laptops and other mobile devices.

On-demand services can help IT teams to easily manage e-mail backup, archiving and retrieval for e-discovery, disaster recovery and other

business requirements. IT teams can also secure mobile data without needing to manage and update server and client software. SaaS services are available to not only encrypt sensitive data on mobile devices such as laptops and PDAs, but also to wipe them clean in case they are lost or stolen.

This is critical for organizations that have or are considering policies that allow employees to bring their own PCs into the network, which could pose a security risk. For companies with largely distributed

SaaS adoption is maturing and finally being baked into IT spending, IT roadmaps and overall enterprise architectures.

 **SHALLY STANLEY**
MANAGING DIRECTOR OF GLOBAL SERVICES, ACUMEN SOLUTIONS INC.

workforces, managing laptop security on-site can quickly cause headaches. A SaaS solution enables organizations to protect corporate data without overburdening IT teams.

IT teams can also roll out services that help them comply with software licensing agreements. IT can monitor software inventory and utilization to ensure that usage maps to what the organization is paying for.

Reducing Help Desk Costs

SaaS-based solutions can also aid in decreasing help desk costs. For

example, IT teams can reduce the time spent diagnosing problems by using tools that automatically gather critical details about desktops and mobile devices such as application versions and system configurations into a single console. Armed with this information, help desk teams can detect problems with little or no assistance from users. They can also remotely load patches and updates to applications and security tools on the remote machines.

In addition, lowering help desk costs is instrumental in making better use of your IT staff. By helping to reduce the length of support calls, you can decrease the staff needed to focus on that task and reallocate those resources to more strategic, revenue-generating projects.

Setting Down the SaaS Path

While SaaS is designed to benefit organizations with large or distributed workforces, companies should take careful steps to ensure success. It's imperative for organizations to evaluate their application inventory before they head down the SaaS path and determine which programs are the best candidates for being hosted off-site. Eric Pearsall, managing director of U.S. operations at Acumen Solutions, says that for SaaS implementations to be a success, organizations must involve IT from the start. "As the promise of SaaS plays out and penetrates deeper into the enterprise, integration with back-end systems could get more complex. You have to consider these issues up front," he says.

Companies must have an internal

2. Dataquest Insight: SaaS Demand Set to Outpace Enterprise Application Software Market Growth, Gartner, August 2007

meeting about the parameters and goals of their SaaS deployment. They should have a complete understanding of the end-user computing environment, including the current challenges and pain points, dates when IT cannot impact day-to-day operations, and a well-communicated, comprehensive deployment plan. IT teams should proceed slowly with deployments and take a phased approach to rolling out SaaS services to ensure users are satisfied. Otherwise, they might thwart adoption.

Another final key to SaaS success is to closely monitor service-level agreements, or SLAs. Organizations should be sure to dedicate resour-

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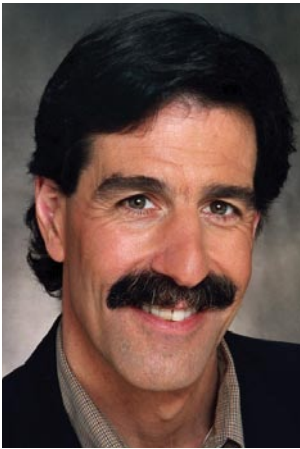
es to managing all aspects of their SaaS service, including testing and

rollout. IT teams should review logs to make sure uptime demands are being met and solicit feedback from users to ensure they are getting acceptable performance levels.

SaaS has proven to be a formidable competitor to on-site business application deployments in the enterprise. Now, with strong offerings that help simplify e-mail and systems management, IT teams can feel safe adopting this strategy for their own application challenges. Increasingly, SaaS will prove to be a solid choice for organizations looking to lower application TCO, reduce complexity in their infrastructure, and reallocate human resources. ▶

Sandra Gittlen is a Massachusetts-based technology writer and former senior editor at Network World.

IT Expert: SaaS Key to IT Powerhouse



As the Software-as-a-Service model becomes increasingly mainstream, CIOs can focus more on strategic, revenue-generating projects and less on infrastructure management. Jeff Kaplan, managing director of the THINKstrategies consultancy, has tracked the Software-as-a-Service (SaaS) market since its infancy, observing its fits and starts. But he says those days are long gone as IT begins to embrace SaaS for everything from routine systems management to business-critical applications. Writer Sandra Gittlen spoke with Kaplan recently on the current state of SaaS and IT management.

Q: Can you describe what's happening in the SaaS market today?

Kaplan: We're definitely in the gold rush phase. I'm seeing a broad-based interest, adoption and satisfaction with Software as a Service by not only business users, who were the early adopters, but also by IT. IT teams are realizing SaaS is a viable and cost-effective alternative to deploying and managing business applications on-site. It's also a great option for routine systems management tasks involving the network, servers, desktops and e-mails.

Q: Why do you think the perception of SaaS is changing?

Kaplan: I think that the myths surrounding SaaS have been debunked. For instance, IT is beginning to see that SaaS is not a threat to their jobs—it's a way to improve them. They no longer have to spend their valuable time on tasks as mundane, yet complex, as deploying and maintaining mainstream applications such as remote desktop management and e-mail business continuity. Instead, they can focus on more strategic, revenue-generating projects.

Also, there's this belief that SaaS offerings are skinned-down or second-class versions of traditional enterprise software. That's just not the case. SaaS-based offerings are often much more feature-rich because they allow the IT organizations to focus more on the key features they need for day-to-day IT responsibilities. As a result, users get the immediate benefit of any and all SaaS features. SaaS providers constantly monitor how users take advantage of their application and use that information to add on new features.

Another myth I've heard is that SaaS is not robust enough for anything other than SMB environments. SaaS solutions tend to be more robust than on-site offerings because they are built from the ground up to offer users real-time access to applications and data from anywhere at any time.

The perception of SaaS is also changing because it allows IT to avoid the up-front capital investment involved with on-site applications. In a time of recession, this pay-as-you-go pricing model is very

attractive. Companies can acquire functionality and scale users on an incremental basis.

Q: Do you think there is a correlation between the pressure IT is facing to protect data and the need for an alternative to on-premise systems management tools?

Kaplan: Yes. Today's IT is responsible for tracking, protecting, archiving and auditing data flows. All those requirements add more layers of management responsibilities for IT as to how data and the devices that house that data are being used. They are feeling the pressure of not only corporate reputation, but also professional liability. Look at the recent headlines surrounding TJX Companies and Hannaford's supermarkets. You're seeing more and more companies that are being accused of admitting to allowing data to get lost or stolen, and they're facing tremendous financial repercussions. At the same time, there's a shift from desktops to laptops to accommodate a more mobile and, in turn, productive workforce. Users have an expectation that they will be able to share information through Web-based applications and social networking tools. IT teams must help maximize employee productivity and the ability to collaborate across the enterprise. This means making data more accessible while safeguarding it against external threats and internal vulnerabilities.

Q: How have IT teams traditionally done this?

Kaplan: In the past, IT teams have had to cobble together a patchwork quilt of asset, configuration, patch and security management tools to perform what should be routine tasks. The manual processes required to keep these envi-

SaaS providers constantly monitor how users take advantage of their application and use that information to add on new features.

JEFF KAPLAN
MANAGING DIRECTOR,
THINKSTRATEGIES

ronments running are prone to errors and inconsistencies in configurations. It's no longer effective in terms of cost or performance to maintain all these systems on-site.

Q: Why is the SaaS approach better?

Kaplan: From a functional point of view, SaaS applications, such as those that address systems management and email business continuity, have been designed with the user in mind. They feature more intuitive interfaces and easier workflow capabilities. They also have archival, auditing and analytical tools built in.

The other major benefit to subscribing to these applications via a SaaS model is the rapid deployment cycle. IT teams don't have to spend time building and testing the applications. They also don't have to worry about licensing and ensuring that everything is patched—let alone up and running. All they have to do is figure out the best business use for the application.

Q: Can you talk about SaaS and managed service providers?

Kaplan: SaaS enables IT organizations as well as channel organizations to maintain the functionality they need without having to deal with the deployment and ongoing maintenance issues of the past. The IT organization can leverage that functionality directly or they can turn to a managed service provider that uses that same functionality to fuel their managed service capabilities.

In both cases, the IT department and the managed service provider are able to leverage the software more fully without the distractions of getting the software up and running. The value-add of the managed service provider is that they can take responsibility for specific service management tasks and allow the IT organization to focus their limited resources on more strategic initiatives. These services enable an IT organization or managed service provider to perform a series of service management tasks in a remote or automated fashion that can be more cost-effective, more reliable, and can also provide greater insight into the user organizations' operational needs.

Q: What advice do you have for IT teams that plan to deploy systems and e-mail management solutions?

Kaplan: The same advice I would always give. You have to look at the functionality the SaaS provider is offering and make sure it matches your business requirements. While there are plenty of interesting point solutions out there today, you have to be careful to not put yourself in a situation where you are cobbling together multiple pieces. Make sure your service provider is able to comprehensively and strategically meet your needs on a long-term basis. ▶

CIOs' Mandate: Focus on Strategy

SaaS solutions offer rapid application deployment, secure IT infrastructure management and peace of mind for the CIO.

Ask any number of CIOs if they prefer to spend time maintaining their infrastructure or developing new strategic projects, and you'll get a consistent answer: Hands down, it's strategizing on new projects. But as midsize or large companies grow, the IT and business demands on the CIO increase as well, limiting the amount of time CIOs can spend on strategic decision making.

An expanding business means managing more desktops and laptops, preventing network and server downtime, ensuring e-mail continuity, and servicing more users, not to mention avoiding risk. As CIOs strive to meet these demands and cut costs, the Software-as-a-Service (SaaS) model is growing rapidly as a management solution in midsize and large enterprises. A Gartner Inc. Executive Program worldwide survey of 1,500 CIOs found that 83% of CIOs see significant change coming over the next three years as they look to meet rising business expectations for IT to make the differ-

ence in their enterprise strategy.¹

SaaS has evolved into a valuable time- and money-saving resource for overall IT infrastructure management, allowing IT managers to focus on key line-of-business initiatives while others take care of systems and network management. Web-based methods that enable remote infrastructure management are not only affordable, but are also proven to be effective and efficient at fast-growing companies.

More Productivity at Remote Sites

Better control and management of remote sites is exactly what SaaS offered for Midas International, one of the world's largest providers of automotive service. Midas, which has 2,500 franchised, licensed and company-owned shops in 19 countries, experienced a brief disruption due to a computer virus. An investigation revealed that the virus had entered Midas' corporate network through a laptop owned by one of the company's field staff.

Upon further analysis, Midas realized that it had very little control over or visibility into the laptops of its 50 field staff, as well as 200 PCs at the company-owned stores. Anti-virus definitions were not current, and the latest critical patches were not installed, leaving Midas open to virus attacks.

"It was long understood that our greatest vulnerability to security threats was with our remote users, and this occurrence simply reinforced that concern. Getting our arms around this group of assets was clearly our challenge," says Bennett Cikoich, vice president of IT at Midas.

1. *Making the Difference: The 2008 CIO Agenda*, Gartner, January 2008

Compounding Midas' problem were two big issues that significantly impacted the software solution it would choose. First, Midas' PC infrastructure was very heterogeneous, with a combination of Microsoft® Windows® 98, 2000 and XP systems. Hence, the software solution needed to work with a heterogeneous infrastructure.

Second, Midas did not have a point-to-point link between the company-owned stores and corporate offices. The software solution needed to work without requiring a LAN or a WAN infrastructure to connect to the PCs of company-owned stores and the laptops of remote field staff.

After evaluating a number of vendors, Midas chose to implement Dell's Remote Desktop Management Services, which include compliance-oriented software services (Asset Discovery, Asset Management, Software Distribution) and uptime-oriented software services (Patch Management, Antivirus & Malware Management, Online Backup).

Dell's compliance-focused software services have enabled Midas to significantly improve its service levels, easily evaluate compliance against license terms, keep software versions consistent across devices, and delete any unauthorized software.

Dell's uptime-focused software services have enabled Midas to ensure that its PCs can operate safely and efficiently every day, with a dramatically lower risk of disruption than ever before.

Midas was able to achieve updated virus definitions 99% of the time and patch compliance greater than 97% of the time, which significantly reduced the risk of future virus attacks. Due to better control over

the remote field staff's laptops and desktops at the company-owned stores, the support desk calls regarding corrupt PCs due to unauthorized software have been significantly reduced, and diagnosis and resolution for calls has become faster.

Dell's solution also addressed Midas's patch management, virus protection and remote asset management requirements using an Internet-based model rather than a LAN-based model, a critical requirement for supporting company-owned stores as well as remote field staff. "Dell has exceeded all our expectations in allowing us to get better control over our PC environment and reducing our overall risk from disruptions brought on by virus attacks. We are very happy with our choice," Cikoch says.

Efficiency Gains Bring 475% ROI

Gaining better control over the PC environment was also a challenge, among others, for The Gem Group, a premier supplier of bags and business accessories with more than 400 assets across its global, distributed IT environment.

The Gem Group began planning for a new ERP system that required a minimum PC configuration for its client-side application. To determine the readiness of its existing Windows-based computers for the new application, The Gem Group needed to quickly assess a number of PC attributes, including operating system, processor speed and RAM.

Compounding this challenge was the fact that The Gem Group had recently expanded its manufacturing facilities to Asia, creating a distrib-

uted manufacturing environment and workforce. This required a comprehensive desktop management solution that could be accessed from corporate IT to provide 24/7 support and maintain corporate compliance levels.

The Gem Group had other needs as well, such as ensuring that end-user productivity was not compromised due to security threats or unmanaged computers, while simultaneously gaining deeper visibility into the security and configuration status of desktops and laptops across its growing global operations.

The Gem Group IT organization had to solve the problem quickly—and with little upfront investment. It also wanted to ensure that traveling executives, sales teams and far-flung manufacturing employees would not need to connect to a LAN via a virtual private network (VPN) for security and configuration updates as well as data backup.

After evaluating numerous alternatives, The Gem Group selected Dell, purchasing its compliance-focused software services (Asset Discovery, Asset Management, Software Distribution) and two uptime-focused software services (Patch Management, Online Backup).

"Our company was growing, our systems weren't operating properly, and end users weren't satisfied," says Ben Messar, Gem's director of information technology. "As our China office expanded, we realized that we had no idea what they had and we were responsible for them. Dell had a great solution to help me address these problems."

The Gem Group's IT organization is now able to proactively manage every employee's computer, including

all laptops, to ensure compliance with software licensing agreements and prevailing corporate policies. Dell's Asset Discovery and Asset Management software services enable The Gem Group to analyze software license information on every PC and quickly generate reports to demonstrate compliance.

The Gem Group's IT organization also has real-time visibility into the condition of its desktop and laptop environment, and IT can make required changes to any PC across the organization in real time, 24/7, from any Web browser. The company estimates that by eliminating its manual compliance and security processes it has saved \$154,000 a year in total expenses, a 475% return on investment using Dell.

Services-based Security Allows Franchises to Focus on Growth

Mail Boxes Etc. Inc. (MBE), a UPS company and part of the world's largest franchise network of retail shipping, postal and business service centers, faced a similar challenge of protecting more than 5,900 franchises and remote centers around the world.

In 2005, Tim Davis, the vice president of technology at MBE, launched an aggressive new security initiative to help domestic franchisees better protect themselves from downtime and revenue loss due to computer problems arising from adware and spyware.

"Not all franchisees are tech-savvy, and since their focus was on managing and growing their business, many routine custodial tasks related to their computer equipment were going undone," says Davis. Franchisees in the domestic network also had difficulty staying up to date with security policies and monitoring the Internet activity of employees.

Davis decided that increased security concerns warranted a shift in policy and worked with MBE to get certain security functions extended out to the stores in the field. "We work in concert with our parent company, UPS, to employ industry best practices for security to protect our home office. It made sense to look for ways to apply many of these

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BEN MESSAR, DIRECTOR OF INFORMATION TECHNOLOGY, THE GEM GROUP

practices to the stores in the field," Davis says. As a result, MBE decided to deliver value-added security and patching services directly to its domestic U.S. franchises by rolling out a new services-based solution.

MBE envisioned that these comprehensive sets of services would support the entire U.S. infrastructure—over 9,900 systems in the domestic franchise network, including Point of Sale/Counter Manifest System (POS/CMS) and Back Office Machine (BOM), as well as 380 corporate PCs in two main locations, San Diego and Chicago.

MBE decided that the solution should work over the Internet with-

out requiring any VPN or direct connectivity. This would significantly reduce the cost and complexity of supporting the franchisees. After evaluating various alternatives, MBE decided that Dell met its criteria.

In Q2 2005, a proof-of-concept was funded to distribute Microsoft XP SP2 to about 6,500 systems. This was a challenging upgrade, and using the Dell Software Distribution software service, MBE saw an outstanding 99% success rate with the migration in its first attempt.

With this success, MBE decided to use Dell as the core of its security and support infrastructure for its domestic franchise network and purchased Dell's compliance-focused software services (Asset Discovery, Asset Management, Software Distribution) and Dell's uptime-focused software services (Patch Management, Antivirus & Malware Management, Online Backup).

Since Dell's software services work over the Internet, the solution did not require any changes to MBE's network infrastructure (firewalls, VPNs, etc.).

MBE now has clear visibility into asset inventory at its domestic franchise locations that have installed the Dell software, including information such as hardware configuration, installed software, malware, spyware, hard drive capacity, free disk space and more.

For each of these growing businesses, the challenge for CIOs is not only to run efficient, cost-effective IT systems, but also to maintain corporate reputation and liabilities. SaaS allows CIOs to focus on what really counts: IT strategies and revenue-generating projects that, in the end, help build a better business. ▀

Packing a SaaS Punch

When it comes to simplifying IT, Dell leads the way with seven key SaaS offerings.

BY SANDRA GITTLEN

Dell has developed a powerful portfolio of Software-as-a-Service (SaaS) offerings to help you simplify management of your IT environment. With more than 5,000 CIOs depending on Dell™ SaaS for everything from e-mail backup to laptop encryption, Dell's SaaS options are easing even the toughest of infrastructure headaches.

"IT management can be very costly and complex," says Paul D'Arcy, director of services marketing at Dell. "We've looked across the landscape and identified areas that are more efficiently managed in the cloud than in the data center," he says.

Here is a rundown of the areas in which SaaS solutions are available for rapid deployment and fast realization of benefits:

1 Desktop management

According to a Gartner Inc. press release ("Gartner Says Effective Management Can Cut Total Cost of Ownership for Desktop PCs by 42 Percent," March 2008), "if [a large company's] PCs are locked down and well managed, the cost per PC per year can be 42 percent lower." IT teams often struggle to gain visibility into their mobile laptop fleet.

Yet, knowing the status of a laptop's configurations, applications and security is critical for compliance, security, maintenance and help desk support. With Dell Desktop Manager, IT teams can update, patch and troubleshoot PCs via a Web-based console. In addition, organizations can rapidly deploy new software applications and discover and track all current assets without deploying complex and costly on-premise systems management applications.

2 Software inventory and usage management

Dell's Software Inventory and Usage Management service enables IT to automate hardware and software discovery, monitor software usage, and track license compliance. As a result, organizations can eliminate unused applications, lower support and maintenance costs, and regain investment dollars by locating lost or stolen assets.

3 Online backup and restore

The annual estimated cost of data loss for U.S. companies is \$18.2 billion.¹ With online backup and restore, organizations no longer have to depend on users to remember to back up their computers. The Online Backup and Restore service automatically backs up data from desktops and laptops to a highly secure off-site data center transparent to users. Data is transmitted using 128-bit AES encryption, and IT teams have Web-based access to centralized management and reporting. Also, IT teams avoid taxing their networks because only incremental data changes are backed up.

1. *The Cost of Lost Data*, Graziado Business Report, Volume 6, Issue 3, 2003

4 Laptop data encryption
Data theft is a rampant and growing problem, and laptops have been a target in many recent high-profile security breaches. The Laptop Data Encryption service is designed to help organizations protect the data that resides on their users' machines at all times, even if laptops fall into the wrong hands. All user data stored on the laptop is encrypted, and authorities can use location-based network trace features to recover devices. The Laptop Data Encryption service also has a kill switch and time-out options to help lock down a device as soon as it is reported lost or stolen.

5 E-mail continuity
E-mail is the most business-critical application in the majority of organizations today. Companies face a 72% likelihood of an email outage in the next 12 months². The Email Management Services Email Continuity Service provides IT teams a standby, reliable e-mail service that can be immediately activated whenever the primary Microsoft® Exchange or Lotus Notes® system is unavailable. Organizations can make a seamless transition to the Web-based service within minutes, helping to eliminate user downtime. Once the outage is concluded, all e-mails sent, received and deleted through the Dell service, including those from BlackBerry® devices, are transferred back to the primary messaging system.

6 Enterprise e-mail archiving
IT teams are under tremendous pressure to retain

e-mails for e-discovery, compliance and disaster recovery. Yet storage can be expensive and burdensome. With the Store Once, Use Everywhere approach to email archiving, Dell's Email Management Services Enterprise Archive helps IT teams solve their need for immediate and searchable retrieval of stored e-mails. These Dell services offer IT teams complete management control over granular e-mail retention policies, hosted storage management that can reduce storage loads by up to 80%, and sophisticated disaster recovery capabilities for e-mail.

7 Crisis management and alerting
During disasters, it is critical that management can maintain two-way communications with employees and key constituents. Dell's Crisis Management and Alerting service is designed to enable organizations to quickly contact many thousands of employees, customers and other important parties to coordinate crisis responses and accelerate recovery times. IT teams can send out automated messages simultaneously

to contacts via numerous communications channels. Organizations can also use the service to poll recipients on their status, facilitate conference bridges, and send out individualized notifications. In addition, real-time audit and reporting features instantly update IT teams on responses. Crisis management leaders can securely share documents via a Web-based collaboration center.

This portfolio of SaaS services can also be used as a stepping-stone to Dell's managed services for remote infrastructure management. Because the SaaS services utilize the same toolset as the managed services, you can start out managing the environment yourself through a SaaS offering and then move on to Dell's managed services. With the managed services portfolio, Dell performs the key tasks enumerated above so that you can redirect your resources toward more strategic, line-of-business initiatives. All of these offerings are flexible and can easily and rapidly be turned on and off to match your business requirements. ▶

POWERED BY DELL'S SAAS-ENABLED REMOTE MANAGEMENT PLATFORM

Dell Desktop Manager helps simplify IT by centrally managing PCs to reduce support costs, automating asset discovery and monitoring software usage while simplifying compliance, and protecting sensitive information through data encryption and online backup. Built around a powerful, scalable and cost-effective Software-as-a-Service (SaaS) enabled delivery platform, Dell's suite of remote management services enables customers to monitor, manage and troubleshoot IT services with minimal up-front investment, and provides the flexibility to leverage ongoing innovation and to configure these modular offers to their needs.

For more information on Dell Desktop Manager Software Services, visit www.dell.com/desktopmanager.

2. Dell MessageOne EMS Activation Data, 2008

Nine Things You Need to Know About SaaS

A Software-as-a-Service expert answers questions about this evolving option for purchasing IT services.

BY BERT LATAMORE

This article originally appeared in the October 15, 2007 edition of Computerworld.

Software-as-a-Service may have come into the enterprise through “the bathroom window,” but it’s definitely becoming part of the mainstream, says SaaS expert Mike West, vice president at Saugatuck Technology Inc., a boutique management consulting and subscription research company focused on disruptive technologies.

And it’s an alternative to in-house operations and outsourcing that IT shops can and should use to deliver services and improve their infrastructure in a cost-effective way. SaaS can offer high-quality services at a lower cost than other alternatives, and it’s particularly good for supporting mobile and geographically disbursed populations, whether they are sales staffers, telecommuters, customers or business partners worldwide. And in its latest iteration, says West, the technology is offered by leading SaaS vendors

as complete platforms unifying normally stovepiped sets of services, supporting underlying data capture and analysis.

Here are West’s answers to some basic questions about the SaaS market. IT and business users (and Internet service providers trying to evolve into SaaS providers) need to know the following information about this new and quickly evolving option for purchasing IT services:

1 What is SaaS?

“Software as a Service, sometimes known as on-demand software, is a new model for deploying business services ... that requires the provider ... to make access to the functionality available typically through a browser,” West says.

It can be seen as the evolution of the application service provider (ASP) model. It differs from ASP in part in that while that model usually provides a unique instance of the underlying application for each user organization, SaaS typically uses a multitenancy architecture, sharing a single instance of an application and a single database of user data among all of a service’s customers. This model provides enormous economies of scale, often allowing SaaS providers to sell services at a significantly lower cost than traditional outsourcers or even ASPs, and to deliver superior return on investment to customers.

The ASP model was criticized for providing generic versions of complex applications such as enterprise resource planning. Advances in underlying technology now allow SaaS providers to provide limited amounts of customization of user

interfaces, functionality and even underlying data structure. Basically, West says, the software is aware of the identity of each user and consults a customization database to determine what customized features to apply.

However, SaaS solutions typically don't provide the full customization that would be available with the internal installation of a complex software package such as SAP. Definitely, one of the things users considering SaaS must determine is whether their organization can live with the managed customization that SaaS supports.

2 What about security? If our data is shared with other organizations, possibly including competitors, how can we be sure we are safe?

"The security solutions offered by SaaS vendors are quite excellent," West says, and the danger of corporate espionage is virtually nonexistent. In some cases, some SaaS providers can even keep critical data inside firewalls for those clients who may require it. However, SaaS clearly isn't the right solution for preserving the nation's nuclear secrets. Obviously, this is another element that potential users need to consider, and many will prefer to keep some data and applications in-house for security reasons. On the other hand, internal corporate security isn't perfect, either.

3 How do SaaS providers charge?

"Typically, users pay as they consume the service

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■ **SAUGATUCK TECHNOLOGY INC.**

on a subscription basis," West says. "Pricing per user per month is the most common model. Pricing by transaction is another. There are a variety of metrics." This is one way in which SaaS differs from outsourcing. "It can allow an organization to try something out with little risk," he says, because the organization isn't committed to a three-year fixed-rate contract or hasn't made a huge upfront investment in hardware and software licensing. However, SaaS providers usually offer significant discounts to customers who make multiyear commitments, West adds.

This pricing model also can make SaaS a better choice for fast-growing companies that anticipate huge growth in use of their IT infrastructure and for services with large annual fluctuations in demand, which is common, for example, in retail.

4 What kinds of services do SaaS vendors provide, and how do they deliver those services?

Companies such as Salesforce.com Inc. (CRM), Concur Technologies Inc. (expense management), Taleo Corp. (human resources), NetSuite (SMB Suite), SAP AG's Business ByDesign (a comprehensive suite of IT business services for small and midsize businesses) and RightNow

Technologies Inc. (CRM) provide a wide variety of services spanning both end-user functionality and IT infrastructure, such as network security, e-mail and collaboration. The latest trend in service development is for SaaS vendors to provide entire sets of IT services—"everything a business could need"—on a unified platform, West says.

These services are delivered across the network and are usually accessed via a browser. This makes them ideal for supporting populations of mobile users, including field sales and support as well as consumers. "There are actually different interfaces for mobile workers," West says. "For instance, Salesforce addresses the sales community, and they are, of course, mobile. They have very good support for mobile PCs, handheld devices, BlackBerries, iPhones—whatever you want to point to, they can definitely support those devices."

Because they are delivered over the Internet, this also makes them ideal for federated, geographically distributed and virtual organizations that reach beyond corporate boundaries to knit business partners together, and for delivering advanced services, such as financial analysis, to customers.

5 Is SaaS mostly for SMBs, or does it have things to offer to large enterprises?

Recently, SaaS penetration in the small-to-midsize business (SMB) market has been growing quickly, but penetration is happening in waves, West says. He estimates that the SaaS market may actually have

greater penetration in large companies today, if one includes 2007 plans to implement SaaS solutions.

6 How mature are SaaS services?

Saugatuck Technology identifies three waves of market development. In the first, stand-alone SaaS services penetrated organizations mostly by selling directly to business units, with little IT involvement or, in many cases, knowledge.

In the second stage, which the industry is presently in, IT is either contracting for services directly or working with business units to ensure that the services meet corporate standards for security, integration with internal systems and other issues. SaaS services support increasing levels of integration both with other SaaS services running on a common system and with internal IT.

SaaS vendors typically provide standard service-level agreements (SLA) and in general provide a high level of service. West says that “99.5% is the lowest standard in SaaS, and it sometimes goes higher, to three 9s or four. Very few data centers can really claim that. They may say they are going to go to five 9s, but that doesn’t really happen.”

On another level, SaaS vendors are aggressively adopting new technology, so their services are evolving rapidly. “We are on the outskirts of Wave 3, which is kind of ‘It’s everywhere, it’s everywhere,’” West says. This third stage in Saugatuck’s model includes full functional integration between the SaaS services and the customer’s infrastructure to the point of moving the focus to

workflow. “It will be another form of business functionality rather than some renegade thing that has come in. So it is rapidly becoming a norm, if it is not already a norm, in many large enterprises.”

And marketplace vendors are unifying their own services and in some cases combining services from several providers into com-

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prehensive suites on a single underlying system. These typically have a large anchor service analogous to the anchor store in a mall, with a long tail of more specialized services focused on a market.

For example, WebX Connect, now owned by Cisco Systems Inc., is about to introduce a comprehensive collaboration offering aimed at helping highly distributed and global organizations in “bringing everybody together in a virtual space,” West says. Salesforce.com has AppExchange, which provides services from several SaaS vendors through a common set of application programming interfaces. Axiom, a partnership of American Express Co. and Reardon, provides a marketplace of services for business travelers anchored by Ameri-

can Express Travel Services with a “tail” of about 1,500 partners on a single platform.

By combining multiple—usually stovepiped—sets of functionality on a single platform, these marketplaces can provide their customers with comprehensive usage data to support business intelligence analysis possibilities not available through traditional IT approaches. This is becoming another differentiator between SaaS and other alternatives such as traditional outsourcing.

7 How mature is the SaaS market?

The market is in its early high-growth phase, having passed the inflection point in the typical high-tech market scenario, West says. It’s characterized by large numbers of fairly small vendors, with more entering constantly. In this case, the growth in the number of providers is being aided by some very large organizations, including Microsoft Corp. and IBM, and some small middleware vendors such as Progress Software Corp., which are helping business partners, particularly independent software vendors, move into the market.

West warns vendors that the migration from independent software vendor to SaaS provider is fraught with pitfalls, and he recommends that they seek help where they can find it. He recommends that users have contingency plans prepared in case their SaaS vendor fails. One difference between renting services and buying software and running it in-house is that if a service provider fails, the service could evaporate immediately, with no warning.



8 Is SaaS more than a flash in the pan?

“We believe it is the future of software, or one of the important elements in the future of software,” West says. “You can’t discount the traditional license model entirely, but certainly there is a strong argument economics-wise that favors SaaS in the marketplace.”

9 What, if any, involvement should service users have with the provider once the contract is signed?

“I think the user also should be very,

very involved in the functional evolution of the SaaS offering,” West says. “In other words, the user should participate actively in the user community, in the user conferences, because the evolution of the software is driven more firmly than in any previous generation of software by the feedback from the buying community.” In fact, some SaaS vendors have suggestion boxes built in to the user interfaces of their software.

“One thing about SaaS is a sense of community, and you should be prepared to be part of that community because it will pay back dividends,” West says. “Continuous and

aggressive innovation is a hallmark of a SaaS vendor in terms of their offering—R&D that doesn’t target two-year release cycles but is constantly looking at how to introduce new functionality. So they’re on the lookout for feedback from their users, and they incorporate it whenever they can.” ▶

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