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1. *"The Forrester Wave™ : Application Server Platforms, Q3 2007," Forrester Research Inc.,* July 11, 2007.
2. *SOA World Magazine 2007 Reader's Choice Awards,* July 3, 2007.

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e WEEK

Eric Lundquist: Presidential candidates need to get technical **41**

How Microsoft's acquisition of Yahoo would affect the industry—and you

BY CLINT BOULTON 9

ZIFF DAVIS
enterprise

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Upfront

Super (Tech) Tuesday

Oⁿ Super Tuesday, Feb. 5, tech was everywhere: twittering away on Google, powering get-out-the-vote SMS campaigns, leveraging mobile political apps, furiously posting at blogging parties, ginning up barrels of money and continuing to weave its political voice into the 2008 national election debate.

However, at the end of the historic U.S. electoral day, nothing had changed and no knockout punches delivered—much to the delight of the underdog campaigns that have been waging war online for more than a year. Driven by an infusion of young campaign volunteers and workers armed and comfortable with technology, Barack Obama is still standing against Hillary Clinton.

And "Mac" (as in John McCain) may be back, but Mike Huckabee is still around, awed as his site "lights up" with money and support, one improbable win after another.

Mitt Romney, on the other hand—who suspended his campaign on Feb. 7—is probably wondering about all those probability outcomes he bought into last year.

Obama and Huckabee likely have Election 2.0 to thank for their early survival and continuing viability.

The 2008 presidential campaign is the first to deploy powerful Web 2.0 tools to change the rules, upsetting traditional political wisdom time after time.

The early online jump in the 2008 election cycle gave wings, cash and hope to Obama and Huckabee.

Those same supporters are now delivering votes, delegates and even more money to carry the campaigns forward.

Obama, in particular, has returned the favor to many of his followers by giving voice to technology issues important to his troops, if not the nation.

The differences between Clinton and Obama on technology issues are minimal—more a matter of style than substance. But Obama rolled out his technology platform at a splashy, quotable campaign stop at Google's Mountain View, Calif., headquarters, announcing, "I will take a back seat to no one in my commitment to network neutrality."

If elected, Obama said, he would appoint the nation's first chief technology officer and declared his Federal Communications Commission chairman would be a true believer in network neutrality.

It was all enough to prompt Clinton campaign workers to remind the media, "Hillary Clinton has been and continues to be a strong supporter of net neutrality."

The detailed tech pitch plays well with Obama's legions of supporters under 30 years of age, many of whom are the sons and daughters of Clinton supporters. The Mommy Party is apparently quarrelling with its children, who have for a generation now known more about the Internet than their parents.

A whole lot more, actually, if you believe a recent poll by the Congressional Internet Advisory Caucus. Almost 40 percent of 18- to 29-year-olds surveyed thought they knew more about the Internet than the candidates, an entirely plausible notion.

Unlike previous presidential campaigns, these new, tech-savvy, OMG political participants plan to vote this fall, potentially changing the dynamics of the campaigns.

In November, eWEEK ran a story posing the question: "Campaigns are increasingly relying on digital media to get the messages out, but does it translate into more votes?"

After Super Tuesday, the answer appears to be yes.
—*Roy Mark*

The greening of IT

Iⁿ San Francisco on Feb. 5, The Green Grid Consortium kicked off its first Technical Forum and members'

**Business has its ups and downs,
but customers should always have**

EFITWSWTDEKIT

(**E**verything **F**rom **IT W**orking **S**o **W**ell **T**hey **D**on't **E**ven **K**now **I**t's **T**here)

IT drives your business. So naturally, it consumes your thoughts. Customers, on the other hand, shouldn't need to think about it at all. They just expect great service. Our approach to Business Service Management helps ensure they get it, by managing IT services based on their impact to your business. That way, with your service commitments fully in sync with your business demands, you'll be able to give your customers that most coveted and elusive of all service experiences: complete satisfaction. Of course, we'll know the source of that satisfaction is really your very own IT department. To learn more, read the Forrester analyst independent report, "The Key To IT Business Alignment Is In Operations (April 2007)" at **ca.com/bsm**.

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meeting. The goal of the consortium, which formed a year ago and now boasts 150 members, is advancing energy efficiency in the data center.

John Tuccillo, a direc-

tor of the nonprofit Green Grid, opened the two-day conference with a reminder to members that there is still a great deal of work to be done in spreading the message of green IT.
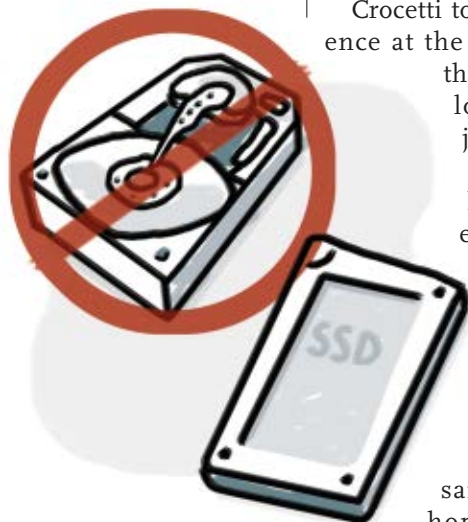
"Let us share with the industry where we are on a couple of fronts," Tuccillo said. "We want to solicit feedback from the industry, engage in the strength that is this organization and move forward. Essentially, we have to get connected to efficient IT."

Renato Crocetti, a corporate vice president at payroll and human resources services company ADP, detailed his efforts in the last three years to reduce the number of ADP's data centers from 20 to two, which meant reducing floor space from 200,000 square feet to 45,000 square feet and cutting power consumption and carbon dioxide emissions by half.

Crocetti told the audience at the conference that he had to look beyond just the servers to see how energy-efficient the microprocessors were that his company was using.

Crocetti said that he's hoping in the future to look at more energy-efficient storage equipment that uses solid-state drives instead of traditional hard disk drives that need more power.

He added that this required getting down into system innards, at least when it came to dealing with vendors.

"We needed to acquire new partners," Crocetti said. "I dealt mostly with platform manufacturers. I dealt with Dell, IBM and Sun [Microsystems]. I never dealt with component manufacturers, so I found myself turning to component manufacturers, and I needed them to understand that we needed to change the game."

While talking green is considered a corporate and socially responsible initiative, The Green Grid members also were sure to emphasize an important benefit of going green—the amount of money companies can save by reducing energy bills.

—Scott Ferguson

Anchors away– way away

I was off the storage beat in early February, covering the mysterious Internet cable outages in the Mediterranean Sea and Persian Gulf.

Some authorities suspect foul play, since the cuts are fairly deep underwater and the cables require powerful tools to damage. Media

representatives at AT&T, Sprint Nextel and Interpol all told eWEEK that the outages look very suspicious but offered no other observations.

These ultra-heavy-duty fiber-optic cables, located hundreds—sometimes thousands—of feet under the waves, don't just snap or get cut by a dropped anchor, as suggested by local government and telecom authorities in Alexandria, Egypt.

Sure, ship anchors dropped approximately 8 and 12 kilometers out in the Mediterranean near Alexandria (Hello?! Nobody sets anchor that far out) just *happened* to hit these cables exactly right and, boom, sever them? Then, two days later, the *exact same thing* happens 32 kilometers offshore in the Persian Gulf? And more cuts have since been reported.

How stupid do these "authorities" think we are?

In fact, no one—not Interpol, not the FBI, not the telecom consortium that licenses the cables—has been able to find out who the culprits are.

In the meantime, FLAG Telecom, owner and operator of several thousand miles of fiber-optic cable in the Middle East, is busily laying new undersea cable to replace the lines that were cut.

—Chris Preimesberger

Super disappointment

I'm not a huge football fan, mostly because I

don't understand what's going on half the time. I thought the Patriots had won the Super Bowl when Tom Brady threw the touchdown pass to Randy Moss with a little more than 3 minutes to go in the fourth quar-

ter. "Isn't it great that it ended up being Brady and Moss who got the winning touchdown, after all they've done all season?" I asked my husband. "They haven't won yet," he answered. "Three minutes is a long time in football."

Indeed it is ... was.

The mighty Pats (I am a native New Englander, after all) fell to the Giants, who simply seemed to want it more.

Speaking of wanting it more, where were the tech companies among the other big competition of the night—for best, most provocative ad?

In a slide show that recently ran on eweek.com, I picked the most "super"

tech ads (www.eweek.com/c/a/Desktops-and-Notebooks/Super-Tech-Ads).

In coming up with suggestions for the list, some of my colleagues and I were amazed at just how many technology vendors had run ads during previous Super Bowls.

But, at this year's Super Bowl? I can think of two: GoDaddy.com's TV ad for its not-suitable-for-TV ad available online and Dell's ad for the Product (RED) version of its XPS laptop.

(Yeah, there were the eTrade ads with the talking baby, the CareerBuilder.com ads—especially that gross one where a woman's heart bursts out of her chest—and the Cars.com ads, but they're not technology vendors per se.)

I did get up from the couch once in a while, but it was mostly during the game, not the commercials. Did I miss something, or is the lack of tech vendor ads an economic indicator? No Intel? No HP? No Apple? No Microsoft?

I guess Microsoft was wrapped up with another kind of advertising—the online kind it figures it can dominate with the acquisition of Yahoo. The announcement of Microsoft's $44.6 billion offer for Yahoo was made the Friday before Super Bowl Sunday.

We'll find out how much Microsoft wants it—and how much Yahoo wants to be part of Microsoft—in the weeks ahead.

In the meantime, just eight more weeks till opening day at Fenway Park.

—Debra Donston

Microhoo-y?

Here are 10 *other* reasons for Microsoft's hostile takeover of Yahoo.

10. Microsoft executives finally find a way to hire Yahoo co-founder Jerry Yang.

9. Ray Ozzie, Microsoft's chief software architect, is tired of people adding up Software Plus Services and getting Google as the answer.

8. With the U.S. economy sagging, Microsoft executives want to get closer to their customers by joining them in debt (the company will have to

borrow to buy Yahoo).

7. Microsoft CEO Steve Ballmer jumped up and down in his office yelling "Yahoo!" as Google's stock price dropped recently. Eavesdropping

senior executives misunderstood.

6. It's geek humor. Somebody thought the bid would be a good practical joke on shareholders. "Ha-ha—$44.6 billion. Ridiculous." Now the joke's on them—and it's not funny.

5. Ballmer wants to retire. This is one way to be offered a severance package.

4. Microsoft has long planned to open up a big Silicon Valley campus, but real estate costs too much. On closer examination, Microsoft could buy Yahoo for less than new property. It's like buying prime Sunnyvale, Calif., real estate already furnished—and Yahoo is free!

3. Ballmer really wanted to buy Google, but he has gotten used to settling for second best.

2. Top Microsoft managers want to give Chairman Bill Gates something really special for his retirement. After all, what do you buy for the world's second-richest person? Uh-oh. He's not smiling. Did they keep the receipt?

1. It's a typo. Microsoft execs thought they were bidding on Yoo-hoo to stock employees' free drink fridges. Now they can't back away without losing face.

—Joe Wilcox

Microhoo or mistake?

There is an upside to Microsoft's Yahoo bid, but it comes with its share of risks

By Clint Boulton

MICROSOFT'S $44.6 BILLION bid for struggling rival Yahoo shook up the market for Internet-based services and stunned industry experts used to seeing the two companies locked with Google in a three-horse race for search, online advertising and software as a service.

What no one seems to know is what Microsoft will look like if it does buy Yahoo. Reaction in the industry is mixed, but most analysts see Microsoft's move as necessary to challenge Google in the Internet market.

Microsoft has spent more than $7 billion in its Online Services Business in acquisitions and data center investments, but it expects to report operating losses for OSB for the foreseeable future, said Technology Business Research analyst Allan Krans.

Meanwhile, Google has steamrolled to the leading search engine position and is building out applications to challenge Microsoft's Office and SharePoint productivity and collaboration software suites. Though only a few years old, Google's Apps are hosted on the company's servers and piped to 500,000 businesses via the Internet, according to Google's count.

Analysts such as Burton Group's Guy Creese said more businesses will pay for the premier edition of those Apps, which includes support and costs $50 per user per year, once Google makes it more enterprise- friendly with records management and better support.

With Yahoo, Microsoft would remain

With Yahoo in its pocket, Microsoft could get a bump in online ads.

a distant No. 2 to Google in search but could close the gap in digital advertising, industry observers said. ComScore claims Google's share of search is 58.4 percent in the United States and 62.4 percent worldwide. A combined Microsoft-Yahoo would have a 32.7 percent U.S. search share, with 15.7 percent worldwide, according to ComScore.

IDC analyst Karsten Weide said Microsoft-Yahoo would garner a combined 22.7 percent of the U.S. Internet ad market, while Google would hold 32.5 percent, a huge gulf in the multibillion-dollar ad market.

However, ComScore said Microsoft would benefit from Yahoo's market-leading share of display ads to hold 25.5 percent of the market. Google claims about 1 percent of this market. But analysts are betting that mobile advertising and, by extension, mobile social networking

ads will be the next great field.

As an early mobile ad market entrant in the United States and Japan, Yahoo is strong on that front, said Kelsey Group analyst Matt Booth. This is an area where Microsoft would seem to have an advantage by adding Yahoo.

Google in November unveiled an open-source mobile operating system software stack called Android as an alternative to Symbian's operating system and Microsoft's Windows Mobile. The company is also rumored to be crafting a mobile phone. An Android-based Google phone would be optimized for Google Apps, extending Google's growing Apps footprint.

Also in question is whether Microsoft would be able to successfully integrate Yahoo's Panama ad platform with its own AdCenter system and combine

its freshly tucked-in aQuantive ad network with Yahoo's network, which includes the Right Media assets that Yahoo absorbed last year.

"Acquisitions are messy, ranging from trying to consolidate advertisers on one platform to figuring out what to do about competing brands like Yahoo, MSN.com, and Windows Live," Forrester Research analyst Charlene Li wrote in her blog Feb. 1.

Other analysts warned that any misstep by Microsoft in integrating Yahoo could help its rivals. Given that the online ad business requires significant levels of account service, "even the perception of a diversion could wind up delivering business to their competitors," said Gartner analyst Andrew Frank.

"We could see a scenario by which Google would actually gain more market share due to industry uncertainty over the integration of the deal," Citigroup Investment Research analyst Mark Mahaney wrote in a Feb. 1 note.

Combining Yahoo Mail with Windows Live Hotmail would enable Microsoft to claim 426 million Web mail users, compared with Google's 90 million Gmail users; a Microsoft-Yahoo company would boast a combined instant messaging audience of 298 million, or roughly 77 percent of the IM audience worldwide, ComScore estimates.

In opposing the deal, Google Chief Counsel David Drummond said adding Yahoo would give Microsoft too many IM and Web mail accounts, allowing Microsoft to create a PC software monopoly that would keep consumers from accessing competitors' services. "Microsoft's hostile bid for Yahoo raises troubling questions," Drummond said in a written statement. "Microsoft has frequently sought to establish proprietary monopolies—and then leverage its dominance into

new, adjacent markets."

The suggestion is that Microsoft could add controls to Yahoo's various user communities in Flickr, Del.icio.us, Yahoo Mail and others. However, it's unclear what such controls might do for Microsoft. Web mail and IM are free and, unlike search, do not provide the same opportunities for

With the bid for Yahoo, Microsoft wants to offer better access to software via the Internet, Ballmer said.

online ad revenues, analysts said.

However, Forrester's Li said that should Microsoft leverage its investment in Facebook—or even buy the social networking vendor—the company would be better positioned to court its Web mail users, possibly with ads.

Microsoft must also figure out what to do with Yahoo's Zimbra messaging and collaboration software, an opensource suite aimed at the lion's share of Microsoft Office and SharePoint users. To be sure, the Yahoo business unit's latest collaboration suite, unveiled Feb. 5, includes e-mail, contacts, calendar and task synchronization from Zimbra to Outlook 2007.

Would Microsoft offer these overlapping products alongside Office and SharePoint tools, preserving Zimbra's open-source architecture? John Robb, vice president of marketing and product management for Yahoo's Zimbra unit, said Zimbra has some 20,000 paying

customers in more than 11 million mailboxes. This is a pittance compared with the millions of corporations tethered to some flavor of Outlook, but Microsoft would need to decide whether Zimbra's software would stay.

What is more murky is what Microsoft's position in cloud computing—or Web-based computing infrastructure and applications—would be. Microsoft's software-plus-service strategy has not borne the fruit the company hoped, while Google and Salesforce.com have pushed forward in the space.

Microsoft CEO Steve Ballmer told financial analysts Feb. 4 the company is not simply a desktop software maker but can leverage its success on the desktop to enable access through the cloud to Windows, Office and all software Microsoft makes. "We are going to have to innovate like crazy to get the position that we want to have in this market," Ballmer said.

Can adding Yahoo's engineering talent and data centers help bolster the would-be acquirer's position versus Google? Forrester analysts Rob Koplowitz and Kyle McNabb said as much in a blog post Feb. 1.

"Yahoo has massive data centers that are extremely efficient," Koplowitz and McNabb wrote. "Microsoft is in the process of building out multiple massive data centers, but the additional capacity and expertise that Yahoo brings to the table will be welcome assets in developing a long term software-plus-services strategy."

Analysts said the union with Yahoo would make Microsoft a stronger rival to Google in search, a formidable foe in online advertising and a viable competitor with strong resources to create a vast cloud-computing network. However, such assumptions are speculative: They assume Yahoo,

_INFRASTRUCTURE LOG

_DAY 69: All we need is one specific piece of info. Gil almost had it, but his hand cramped. How are we supposed to find trusted business information when these massive volumes of conflicting info keep pouring in?

_Gil just grabbed a stuffed panda.

_DAY 71: The answer: IBM solutions for leveraging information. Now we can cleanse info and standardize source data fields for consistency and accuracy. I can create a single, accurate and unified record of info across our source systems. Everyone can make better decisions.

_Just in time—I think we ran out of quarters.

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its shareholders and regulators in the United States and abroad will bless the deal.

Yahoo, which has struggled financially in recent quarters and rebuffed overtures from Microsoft this time last year, has been quiet since promising Feb. 2 to "evaluate this proposal carefully and promptly." The board reportedly was meeting Feb. 8 to discuss the offer, although no decision had been announced by press time.

Earlier in the week, Google CEO Eric Schmidt reportedly reached out to Yahoo CEO Jerry Yang for support and some sort of alliance between the two companies.

Some in the industry said the deal would be bad for businesses, despite bringing Microsoft closer to competing with Google. James Bilefield, CEO of international ad server Openads, who worked for Yahoo from 1999 to 2004 as managing director of consumer and network services, said the deal would hurt his business because it would mean one less place his publishers could get ads for their inventory.

Openads, which works with more than 30,000 small and midsize publishers in more than 100 countries, offers an open-source alternative to DoubleClick, which Google is trying to acquire for $3.1 billion.

"Some of these companies are too small to have their own sales teams directly, so they rely on the big ad networks—Google, Yahoo and Microsoft—to provide them with ad dollars," Bilefield told eWEEK. "One less player in the market is unlikely to be healthy."

Mike Leo, CEO of digital ad workflow software provider

Operative, co-founded and helped build the aQuantive ad network, whose purchase by Microsoft last year can be seen as a steppingstone to the Yahoo deal.

Leo said he likes the potential synergies between Yahoo's Right Media online ad exchange assets and Microsoft's aQuantive Atlas ad-serving capabilities. However, opposition by officials from both Yahoo and Google will make it difficult for Microsoft to close the deal, he said.

"Google is highly motivated and will pay money to make the deal not doable," Leo said. "Between having the

Drummond said the deal "raises troubling questions."

board of Yahoo not [wanting] a deal and Google being willing to disrupt the deal, there [are] a lot of possibilities there."

That opposition aside, Forrester's Li summed up the logistical challenges in her blog: "Cultural differences, geographic distances, and different technology platforms will also muck up things, making a merger highly distracting to an organization that needs to be focused on a highly competitive marketplace."

Another wild card is whether U.S. and European regulators would approve the deal. Some analysts point to the hard road Google has had to walk in its bid for DoubleClick as a cautionary tale—the Federal Trade Commission has approved that deal, but the European Commission has not yet made a decision. However, others suggest that regulators may see the merger as giving the industry a strong No. 2 rival to Google in search and advertising.

"Antitrust laws are a concern with any deal of this size," Gartner's Frank said. "While the current U.S. administration is less likely to pose a problem, in recent years the European Union has aggressively policed similar mergers."

Congress has also stepped into the ring with a House Judiciary Committee panel scheduling a hearing for Feb. 8. However, the hearing was canceled. *e*

Senior Editor Peter Galli contributed to this report.

Microsoft courts Yahoo

The software company's bid to buy the search company set off a firestorm around the industry. Here's what's happened so far:

Jan. 31
▶ Microsoft's Ballmer sends a letter to Yahoo's board of directors outlining the $44.6 billion offer

Feb. 1
▶ Microsoft publicly announces its intention to buy Yahoo
▶ The European Union declines to comment on the proposal, though experts say Microsoft's difficult past with regulators there could lead to increased scrutiny should a deal be made
▶ Sources say News Corp. has no interest in buying Yahoo

Feb. 2
▶ In a Web site posting, Yahoo officials say they will take their time weighing the Microsoft offer and that they are open to other bids
▶ House Judiciary Committee panel sets a Feb. 8 hearing date on the proposal

Feb. 3
▶ Google lashes out at the proposed deal, saying Microsoft is trying to dominate the Web mail and IM markets
▶ Sources close to Yahoo say the company may consider an alliance with Google to rebuff Microsoft bid

Feb. 4
▶ Ballmer makes pitch for the acquisition to financial analysts

Source: eWEEK reporting, Reuters

IBM makes BI push

By Renee Boucher Ferguson

Days after Cognos deal closes, company rolls out first fruits of the agreement

TO IBM, IT'S ALL ABOUT the math.

With its $5 billion acquisition of business intelligence software maker Cognos completed, IBM officials are saying the company will differentiate itself in the fast-consolidating BI market through its decades-long development of sophisticated analytics derived from its mathematical expertise.

"IBM is a treasure trove of technology," Steve Mills, IBM senior vice president and group executive of the IBM Software Group, said during a press conference in New York Feb. 6.

Mills said that while IBM has not been known as a BI vendor in the past, "we are the only company that deals with deep analytics and sophisticated mathematics to conquer things like scheduling and bio research."

To show that it's hitting the ground running with its latest acquisition, IBM announced 10 new and enhanced software packages for the banking, retail, health care, government, life sciences and manufacturing vertical industries.

In addition, six pre-integrated packages bring together IBM and Cognos' software and hardware and a new Information on Demand Infrastructure Services offering to help companies plan, design and deploy an enterprisewide data, storage and content management system, officials said.

IBM will involve the Cognos team in the ongoing research within IBM's

> ## '[IBM] deals with deep analytics and sophisticated mathematics to conquer things like scheduling.'
>
> —STEVE MILLS

mathematics department, an area historically focused on improving supercomputing but now examining aspects of data and information on demand.

"What I see happening is computing is becoming much more valuable as a tool to be used by many more people," IBM Fellow Brenda Dietrich said. "If we are able to capture the mathematics that are well-posed, then it opens the world of mathematics to everyone, not just the geeks among us, and people can make better decisions."

On a broader scale, IBM plans to couple its technology with that of Cognos to offer an architectural approach to Information on Demand and its corollary, performance management.

"Information on Demand is about unlocking the business value from information," said Ambuj Goyal, general manager of IBM information management software. "It's about making things better. It might be about doing human resources automation or work force automation, but they fit hand in glove with an architecture that starts from the top."

IBM announced its IOD strategy—a compilation of software, hardware, research and services designed to help companies manage data and content to gain insight and optimize business—in February 2006 and has since invested about $1 billion in building the division. Prior to the formal launch of IOD, IBM had already acquired a number of companies, including Ascential Software, Trigo Technologies and iPhrase Technologies. After the launch, IBM continued acquiring companies to add to the mix, such as Unicorn Solutions, FileNet, DataMirror and Princeton Softech.

With similar BI acquisitions under their collective belts—Oracle acquired Hyperion in March 2007 and SAP bought Business Objects in January—IBM, Oracle and SAP will battle for supremacy in the fast-emerging performance management market.

Since IBM has had a long-standing partnership with Cognos, a relationship that has spanned 15 years, both groups have been able to at least start to bring their product portfolios together relatively quickly.

For example, the 10 new industry solutions include an expansion of the IBM Retail Integration Framework to incorporate Cognos' Store Operations Planning Blueprint, which has been preintegrated with IBM's retail data models. At the same time, the Cognos 8 BI "starter pack" for IBM InfoSphere Warehouse and distribution of InfoSphere Warehouse with Cognos 8 BI have been combined. *e*

Dell in charge

A year after taking over as CEO, Michael Dell has his company back on track

By Scott Ferguson and Jessica Davis

COUNT LEW MOORMAN AMONG those impressed with Dell the last 12 months.

Moorman, senior vice president for strategy and corporate development at hosting company Rackspace, has never been shy about telling Dell it needed to improve its technology. He was vocal in pushing Dell to adopt Advanced Micro Devices processors for its servers.

After seeing the OEM lose some of its edge over the past few years, Moorman reacted with cautious optimism when Michael Dell announced his return as CEO Jan. 31, 2007.

While more remains to be done, Moorman sees a company that, while different in some ways, has rediscovered the formula that made it one of the industry's most recognizable powerhouses.

Acquisitions were key to the company changes Michael Dell made.

"We have had a very positive improvement with our relationship with Dell during the last year," Moorman said. "I don't know how much of that is because of leadership change, but in terms of them being more customer-centric and listening more, we have seen a big improvement—both from a product standpoint and a customer relationship standpoint. We feel that we are in much better hands than we were 18 months ago."

Since his return as CEO 13 months ago, Michael Dell has worked to bring his namesake company back from the malaise it suf-

fered the previous two years. There have been new technologies added to the portfolio, a radical rethinking of the hollowed direct-sales model, an embrace of the IT channel and retail sales, and some hefty acquisitions that many industry observers believe represent the biggest change at the company and are key to unlocking its new strategy.

In an interview Feb. 4 before his company unveiled a new line of storage products—the first fruits of its $1.4 billion purchase of EqualLogic—Dell said 2007 was a good year, as illustrated by the growth in the storage business.

"I've been really pleased with our last four quarters," Dell said. "I feel really good about us right now. We're growing at a faster rate than ever. Our storage business is the fastest-growing in the industry right now. It's been that way for the last seven quarters. This is due to our distribution system, new and innovative products, our geographic expansion, and a better cost structure alignment that we've put into place. Storage is one of our three most important businesses right now, along with servers and PCs. I intend to maintain that emphasis in 2008."

Charles King, an analyst with Pund-IT Research, said Dell remains fundamentally the same company it has always been, meaning that it still takes significant advantage of its supply chain to

leverage the best prices for its hardware. What is different, King said, is the approach Michael Dell and his management team are taking to improve the company through several bold acquisitions.

"What really has impressed me is that since Mike Dell's return, the company has moved forward with some very specific products and has made bold changes through acquisitions, which it had never prided itself on before," King said.

So far, Michael Dell's return to the day-to-day operations to replace Kevin Rollins—his handpicked successor—more closely resembles Steve Jobs' return to Apple than Ted Waitt's move back to the front office at Gateway.

"Michael Dell's return was a very dramatic event, and I think you have seen that instead of a rip-and-replace plan, there has been a much more methodical approach and a look at what has been working and a look at where they can shore up the weak points," King said.

In the year since his return, Michael Dell has taken the company to places that many never thought it would go. The first, and probably most notable, was into the channel—both in terms of agreements with distributors and VARs as well as the consumer retail channel with big announcements involving the likes of Wal-Mart and Staples.

The other major transformation of the company involved acquisitions, an area that the organization had shunned previously. Within its enterprise business, Dell used acquisitions to bolster its storage division—such as the EqualLogic

buy, which closed Jan. 28—and its services portfolio, through its Nov. 15 purchase of Everdream, which made SAAS (software as a service) offerings for remote service management. Services is an area of Dell's commercial business in which many IT watchers say it lagged far behind Hewlett-Packard and IBM.

In July, Dell also bought Silverback Technologies, another service delivery vendor that offered a platform for remote monitoring and management of infrastructure hardware, such as servers, storage devices, PCs and notebooks.

In another acquisition, Dell in November completed the purchase of ASAP Software, which brought software licensing and asset management capabilities to go with the OEM's experience with commercial IT and services.

Stephen Baker, an analyst with The NPD Group, said that in the next year, Dell has to make sure that it not only keeps up with its channel strategy to ensure that it works and gets better as time passes but also continues with its acquisition strategy and integrates those parts into the company's portfolio.

"In terms of acquisitions, they really don't have the time to sit back and absorb what they did," Baker said, adding that Dell will likely continue to focus on purchases that help it with storage and services. "They have to constantly make sure these acquisitions are worthwhile and help the company keep up with the pace of technology. Dell has to keep its foot on the accelerator in order to keep up its advantage."

One area that Dell did not change much, Baker said, was its commercial PC business. While the company did introduce new technologies, such as mobile workstations with solid-state drives, most of the advances were aimed at improving consumer PCs as well as those for small and midsize businesses. In July, Michael Dell personally introduced the Vostro line for smaller companies. The Vostro systems were simpler to install and eliminated "bloatware."

"They have been much more responsive to the midmarket and to their consumer users in general," Baker said. "Right now, those are the biggest opportunities and the fastest-growing segment of the market."

For more than a year, Dell, always known best as a PC vendor, watched as its share of the PC market slipped behind that of HP. Dell also found its PC business further threatened by lines of cheap laptops from the likes of Acer and Toshiba.

The company has now managed to stem its losses in the worldwide PC market. Research company IDC found that Dell shipped nearly 400 million PCs in 2007, an increase of 2.3 percent compared with the pre-vious year. Several analysts agreed that Dell's move into retail consumer markets, while not a huge step forward, helped reverse some of the losses. Dell also has its eye on emerging markets, opening a new facility in Poland in January to better supply Eastern Europe.

In addition, Dell maintains its No. 1 ranking as the PC vendor of choice for the enterprise, according to Forrester Research.

Storage also will be a key focus for Dell. The company Feb. 4 began worldwide delivery of EqualLogic's SAN (storage area network) arrays in the form of the Dell EqualLogic PS5000 series. The arrays use EqualLogic's iSCSI architecture, which Dell officials say is twice as fast as conventional storage arrays and easier to install and maintain, thanks to a simpler-to-use management GUI and a new tool kit.

On the financial side, Dell managed to overcome some of the problems that plagued Rollins before he left the company in January 2007. By October, Dell's own internal auditing committee had announced that some executives had changed financial reports to meet quarterly Wall Street expectations, and the company ultimately had to restate $92 million in earnings.

When Dell reported its third-quarter number for fiscal year 2008 in November, its revenue increased 9 percent year over year, to $15.6 billion, while its net income jumped 27 percent, to $766 million. Dell is slated to report its fourth-quarter earnings Feb. 28. *e*

Senior Writer Chris Preimesberger contributed to this report.

An evolving Dell

During his tenure as CEO, Kevin Rollins made the move to bring AMD technology to Dell's servers. Since retaking the reins as the top executive a year ago, Michael Dell has made more changes, including:

▶ **Embracing the channel** Though still holding true to its direct-sales model, Dell has aggressively courted resellers and retailers such as Wal-Mart and Staples.

▶ **Growing through acquisitions** A key part of this strategy was buying storage provider EqualLogic in November for $1.4 billion; Dell also bought SAAS company Everdream in November.

▶ **Fixing the financials** Using an internal auditing group, Dell by October had straightened out the fiscal issues that had plagued the company for more than a year.

Source: eWEEK reporting

Making 'Oslo' a destination

Microsoft works on new programming language as key part of SOA strategy

By Darryl K. Taft IN REDMOND, WASH.

IN OCTOBER, MICRO-soft unveiled "Oslo," the company's broad SOA strategy that officials said will touch on multiple product areas ranging from servers to services to development tools. At the time, little if any core technology for Oslo had been released. However, that is starting to change.

Microsoft engineers are beginning work on a new declarative programming language, a supporting editing tool and other components, according to sources close to the company.

Microsoft announced Oslo as part of an undefined vision for simplifying application development, design, management and deployment.

Company officials said Oslo represents a core set of technology investments that will encompass both a services infrastructure—spanning the server, client and Internet "cloud"—as well as an executable modeling platform that will include a general-purpose modeling language, tools and a repository.

However, the sources said that at the heart of the Oslo initiative lies a new declarative programming language currently known simply as "D." If, as the code name implies, Oslo

were a city, D would be the key to Oslo.

According to the sources, D is a new language under development at Microsoft that is aimed at building appli-

> **Microsoft's modeling tools will be as simple as using the company's Excel spreadsheet.**
>
> —ROBERT WAHBE

cations and components for the Oslo repository. However, D is but one piece of a much-larger puzzle that will include graphical modeling tools and other components. D is expected to be a textual modeling language suitable for use by business professionals and

domain experts.

Meanwhile, accenting D will be a new editing tool known as Intellipad. Intellipad will serve as a text editor for D and will further support the development of applications and other content for the Oslo repository.

Although Intellipad is targeted primarily for use with D, it will be capable of supporting other declarative languages, sources said. Intellipad is being designed to be both customizable and suitable for scripting. The technology also is known inside Microsoft as Emacs.Net, in homage to the Emacs text editor made popular in Unix.

'Natural' text

"[MICROSOFT ENGINEERS] care deeply about having natural ways to write things down in a text file that are not only natural to write but, more importantly, natural to read," said Don Box, an architect in Microsoft's Connected Systems Division, at the Lang.Net conference on the Microsoft campus here Jan. 30.

The Connected Systems Division is working on D and Intellipad, sources said. However, other groups within Microsoft, including the Developer

Division, are working on different components of the Oslo strategy.

Meanwhile, when some Microsoft bloggers began referring to an Emacs.Net effort late last year and earlier this year, Burley Kawasaki, director of product management in Microsoft's Connected Systems Division, issued a statement.

"The recent reference to a possible 'Emacs.net-like' environment is referring to some of the R&D efforts we're exploring that would help enable model-driven development to enter mainstream use by the developer community," Kawasaki said.

"While it's too soon to announce any specifics in terms of product offerings, this generally referred to some of the early thinking we're doing around Oslo's modeling platform currently in development at Microsoft, specifically focused on how developers will want to edit and create declarative models," he said.

In his Lang.Net talk, Box emphasized Microsoft's need to focus more on declarative programming.

In declarative programming, the developer focuses on the "what" rather than the "how" of a process. A

program is declarative if it describes what something is like rather than how to create it.

Better yet, in a typical procedural program, the developer writes instructions to tell the computer how to do certain tasks, whereas in declarative programs, developers instruct the computer specifically on what results they seek.

Twofold goals

BOX SAID MICROSOFT HAS two primary goals with its modeling initiative: to enable developers to write less code and to better understand their software.

Microsoft Chairman Bill Gates has long been a modeling proponent, publicly stating as far back as 2003 Microsoft's intent to provide greater modeling support.

Box said that at a recent off-site meeting he attended with Microsoft senior managers, Gates listed modeling among his top initiatives for the company going forward. When Box asked Gates which initiative was his favorite, Gates said modeling was most important because developers should have to write less code.

Box said Microsoft's modeling approach has various elements. A key element is to increase the data-to-code ratio in the Microsoft platform. "This is not some 1980s CASE play where we're doing round-tripping between your UML [Unified Model-

ing Language]—although we'll probably do some of that," Box said. "But really what we're talking about is making the platform just work this way so that the thing that's on the hard disk and runs is more data than it is code."

Box also said Microsoft is working to help users apply more data processing machinery to data, particularly because most systems have capacity they do not use. He indicated that search and indexing technology could be used to prepare data for modeling scenarios.

Meanwhile, Box said that despite being presented with breakthroughs in declarative programming, Gates' first question on most every new declarative technology put before him is: "Can I write PowerPoint in it?"

Box said he wrote his Lang.Net presentation

in Microsoft declarative technology, including XAML (Extensible Application Markup Language), to indicate where the company is headed in applying ease of use in its tooling.

"It would be great to have an XAML-based schema language with run-time support for it," he said.

'Two-beer test'

HOWEVER, MICROSOFT'S current offerings don't cut it for simplicity, Box said. "Right now, it doesn't pass my two-beer test," he said. "I didn't have two beers before the talk so I was able to do this. If I had had two beers, I would not have been able to write that XAML. Ultimately we want things to pass that two-beer test."

"Think Excel," Robert Wahbe, corporate vice president of Microsoft's Connected Systems Divi-

sion, told eWEEK following the October launch of Oslo at Microsoft's SOA and Business Process conference. Wahbe said Microsoft's new modeling tools will be as simple as using the company's Excel spreadsheet.

Microsoft's foray into modeling will be broad-based and, for some, will represent an alternative to IBM's Rational modeling technology, which many users have described as heavy and complex. Yet Microsoft faces its own issues regarding complexity with its tooling.

Jon Rauschenberger, chief technology officer at Clarity Consulting, said he is encouraged by what he's heard about Emacs.Net.

"I will say that, in many ways, [Microsoft's] Visual Studio has grown into a tool that's far too large and complex for a wide range of development needs," Rauschenberger said. "If I need to write a quick managed console app to solve a problem, it would be wonderful to have a lighter-weight alternative to the multi-gig footprint that Visual Studio has evolved into. I don't know if that's the direction they are heading in, but it is one that I and our customers would welcome."

Microsoft's Kawasaki said he views the broad-based Oslo strategy as a large investment for the company akin to the announcement of .Net years ago. *e*

That's 'Oslo,' with a 'D'

Microsoft is working on a new programming language for its Oslo SOA strategy. The language:

▶ **Will be declarative and include an editing tool and other components**

▶ **Will be a textual modeling language that can be used by both business professionals and domain experts**

▶ **Will be used to create applications for the Oslo repository**

▶ **Will include Intellipad, a new text-editing tool for the D language**

▶ **Intellipad will support other declarative languages along with D**

▶ **Intellipad also is known inside the company as Emacs.Net**

Source: eWEEK reporting

A leaner, meaner Windows Server

REVIEW: New OS offers networking upgrades, stripped-down configuration

By Jason Brooks

"FASTER" AND "SLIMMER" ARE two adjectives to which few software upgrades can lay legitimate claim—particularly if the upgrade in question is a Windows operating system.

And yet, Windows Server 2008, which recently hit the RTM (release to manufacturing) milestone, demonstrates that Microsoft can produce a lean, mean server machine—and do it, no less, atop the same code base that backs the company's oft-maligned Windows Vista client operating system.

The new Windows Server boasts a set of networking enhancements that dramatically boost file-serving performance. In addition, the product can be deployed in a new, stripped-down Server Core configuration that significantly reduces the attack surface of systems hosting certain Windows Server roles.

Toss in a more modular and securable Web server in IIS (Internet Information Services) 7.0, Microsoft's new hypervisor-based virtualization functionality and a host of management enhancements, and Windows Server 2008 merits eWEEK Labs' Analyst's Choice designation.

However, that's not to say that the product is without its warts. For instance, while it's great to see Windows Server 2008 take a page out of Linux's book with support for slimmed-down deployments, Server Core supports only a limited set of predetermined roles, such as those for file or domain services.

What's more, due to its monolithic packaging and broad dependencies, Microsoft's .Net Framework cannot be installed on Server Core instances,

(Top) Windows Server 2008's Server Manager gathers the operations needed to conduct on the server. (Bottom) Windows Server 2008's overhauled TCP/IP stack and a new version of its SMB service together deliver greater performance in file sharing.

which, among other things, bars Microsoft's innovative PowerShell command-line interface from the command-line-centric Server Core.

However, assorted quibbles aside, Windows Server 2008 comes with a value proposition that's significantly stronger than that of its client-side sibling, Vista, and the product is well worth evaluating both for organizations currently running Windows and for those that are not.

Installation

WINDOWS SERVER 2008 IS AVAILable in five versions: a $999 Standard edition that comes with five client access licenses; a $3,999, 25-CAL Enterprise Edition; a $2,999-per-processor Datacenter Edition; a $2,999-per-processor version for Itanium-based systems; and a $469 Web server edition.

Versions of Windows Server 2008 also are available for x86, x86-64 and Intel Itanium 2 platforms.

I tested the x86-64 version of Windows Server 2008 on a Dell PowerEdge 830 server with a dual-core Intel Pentium D processor and 2GB of RAM. I also tested the system in both full-install and Server Core configurations in a variety of virtual machines under VMware's ESX Server.

I installed a couple of my Windows Server 2008 instances using the product's spruced-up network install facility, WDS (Windows Deployment Services). I installed the WDS role on one of my Windows Server 2008 machines and directed the service to fetch an install image from my Windows Server 2008 install media.

From there, I was able to boot a new system on my network using

PXE from the WDS service and kick off a new installation.

Performance

WINDOWS SERVER 2008 SHIPS WITH an overhauled TCP/IP stack and a new version of its SMB file-sharing service, which together can deliver significant performance gains in file-sharing scenarios, specifically over high-latency connections.

Unlike previous versions of Windows Server, which bound network adapters to a single processor, Windows Server 2008 can spread processing for incoming network traffic across multiple processors.

Another enhancement to Windows Server's TCP/IP stack is the Receive Window Auto Tuning feature, which determines the optimal amount of data to be sent over a connection at once by measuring the latency of the connection. On high-latency links, larger amounts of data can be sent efficiently at one time, but as connection latency grows, Windows Server sends less data per transmission window.

In previous versions of Windows, administrators could adjust this setting themselves by manipulating registry values. However, Windows Server 2008's knack for automatically adjusting these values will make this optimization available to a broader range of sites.

Microsoft's SMB 2.0 file services protocol boosts performance over high-latency links by reducing the "chattiness" of the protocol. Rather than wait for receipt acknowledgments before sending more data, SMB 2.0 supports sending multiple SMB commands per packet. This more parallel method of operation can deliver substantial speedups that grow more dramatic as connection latency lengthens.

SMB 2.0 requires Windows Server 2008 or Vista on both ends of the connection; otherwise, Windows Server 2008 or Vista will negotiate down to SMB 1.0.

Management

ONE OF WINDOWS SERVER 2008's most recognizable features is the Server Manager, an outgrowth of the "configure my server" dialog that launches by default on Windows Server 2003 machines. However, rather than serve only as a starting point to configuring new roles, the new Server Manager gath-
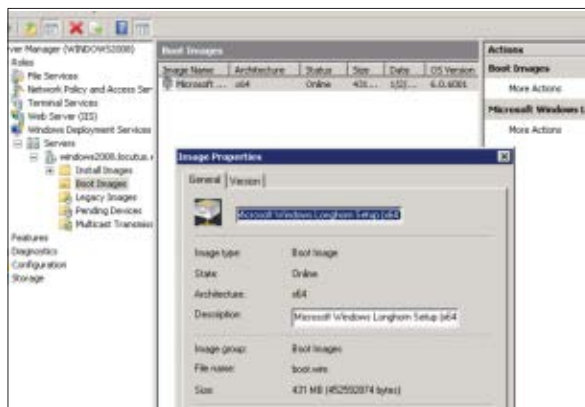
After a couple of Windows Server 2008 instances and an appropriate server role were installed, the new system was able to boot up on the network from WDS and kick off a new installation.

ers together pretty much all of the operations you'd want to conduct on your server.

I used the Server Manager to add new roles to my test machines; for roles I'd already installed, the Server Manager presented me with control panels containing all the pertinent action and information related to those roles. I could see right away, for instance, whether the services comprising these roles were running.

Virtualization

ONE OF WINDOWS SERVER 2008'S MOST promising features is its support for hypervisor-based virtualization. The feature, which Microsoft calls Hyper-V, lets administrators host x86 or x86-64 operating systems on

Windows Server and compares well to VMware's ESX Server and Citrix Systems' XenEnterprise virtualization products.

Microsoft has designated the version of Hyper-V that ships with Windows Server 2008 as a preview edition, with a final release promised within six months. eWEEK Labs will conduct further tests of Hyper-V—formerly known as Viridian—as we approach that time frame.

In addition, Windows Server 2008 ships with noteworthy improvements to what Microsoft has taken to calling presentation virtualization—or Terminal Services.

One Terminal Services enhancement, which Microsoft calls RemoteApp, enables administrators to publish individual applications as opposed to remote desktop sessions. I tested RemoteApp with the Firefox Web browser, the GIMP image editing application and VMware's Virtual Infrastructure client. From a Windows XP or Vista client, these applications appeared as if running locally, complete with resizable windows.

IIS 7.0

THE MODULAR DESIGN EXHIBITED in Windows Server 2008's stripped-down Server Core configuration carries over to Microsoft's Web server, IIS 7.0, which consists of more than 40 modules that administrators can install as needed. This modularity helps limit IIS 7.0's attack surface and keeps patching requirements minimal.

Also noteworthy in IIS 7.0 is the server's move to XML-based text files for configuration, which can help simplify configuration tasks. *e*

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ActiveX under siege

Facebook, MySpace image uploaders are vulnerable to attacks, experts say

By Ryan Naraine

SECURITY EXPERTS ARE turning their attention to the ActiveX controls on Microsoft's Internet Explorer.

US-CERT Feb. 4 urged Web surfers to immediately disable ActiveX controls from IE to protect against a swath of publicly reported—and unpatched—software vulnerabilities.

The US-CERT recommendation followed the release of exploit code for multiple zero-day flaws in image uploaders used by Facebook and MySpace and bugs in the ActiveX control that ships with the Yahoo Music Jukebox software.

The exploits, posted to the Milw0rm.com Web site, provide a road map for full remote code execution attacks on Windows computers.

ActiveX controls are commonly used in Windows Web applications for animation displays or to enhance user interface functions to include items such as spreadsheets and tool bars, but the technology has been plagued by critical vulnerabilities and implementation issues.

According to Will Dormann, a US-CERT security researcher who has been beating the ActiveX security drum over the last few years, the use of ActiveX in a Web browser greatly increases the attack surface—or "attackability"—of a system.

Because vulnerabilities in ActiveX objects may be exploited via IE, even if the object was never designed to be used in a Web browser, security researchers say it is a prime target for drive-by malware downloads.

According to Erik Kamerling, a vulnerability analyst at Symantec's DeepSight threat center, the availability of exploits for flaws in high-profile targets such as Facebook and MySpace is cause for concern.

Although Symantec officials are unaware of in-the-wild exploitation of the ActiveX flaws, there's a feeling that attacks are inevitable.

"[We have] confirmed that these issues can be used to execute code or crash the vulnerable applications," Kamerling said in a written warning to DeepSight members. "Judging by the wide distribution of these controls, we assume that these issues will be used by attackers and we are monitoring for such developments."

In all, Kamerling said there are three new vulnerabilities in widely deployed ActiveX controls, as well as one exploit for related, recently disclosed issues.

"Two of the issues affect the Aurigma and Facebook ImageUploader library," he wrote. "Although very similar to the recent Facebook, MySpace and Aurigma image-upload issues disclosed on January 31, 2008, these new ImageUploader issues are distinct and affect different properties. The remaining two vulnerabilities affect Yahoo Jukebox MediaGrid and DataGrid ActiveX controls.

"In tandem with the public release of this information, remote code-execution exploits targeting the Aurigma, Facebook, and Yahoo issues were released," Kamerling continued. "Each issue allows remote attackers to execute arbitrary code in the context of the application using the ActiveX control (typically Internet Explorer)."

In the absence of patches, Symantec recommends that IE users take "extreme caution" when browsing the Web and ensure that the browser is configured with the highest security settings.

US-CERT goes a step further, recommending that IE users disable ActiveX scripting in the browser. *e*

Disabling ActiveX

In the wake of reports regarding the technology's vulnerabilities, security experts are urging users to disable the controls. Here's a list of steps to take to configure Internet Explorer to handle ActiveX controls in a safe way:

▶ Select Tools, then Internet Options.

▶ Select the Security tab. The Internet zone is where all sites start out.

▶ The security settings for this zone apply to all the Web sites that are not listed in the other security zones. US-CERT recommends the High security setting be applied for this zone, which will disable several features including ActiveX, Active scripting and Java. With these features disabled, the browser will be more secure.

▶ Click the Default Level button and then drag the slider control up to High.

▶ For more fine-grained control over what features are allowed in the zone, click the Custom Level button. Default values for the High security setting can be selected by choosing High and clicking the Reset button to apply the changes.

▶ Ensure that all default settings related to ActiveX controls are disabled or set to be approved by an Administrator.

Source: eWEEK reporting

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Oracle pushes app integration

Company touts its AIA strategy, but analysts question platform's feasibility

By Renee Boucher Ferguson

ORACLE IS THROW-ing a lot of promises behind its Application Integration Architecture.

Officials with the software vendor say the platform is designed to eventually be a set of development standards and methodologies for Oracle, its customers and its partners.

It also will be a way to efficiently bring together the many disparate applications under Oracle's ever-expanding umbrella—and outside the Oracle pantheon as well—in a way that Oracle's Fusion Middleware hasn't been able to do.

When Oracle announced AIA at its Oracle Applications User Group conference in April 2007, the company first released a number of Process Integration Packs—distinct integrations between Oracle applications based on a specific business process, such as the opportunity-to-quote process between Siebel CRM OnDemand and Oracle E-Business Suite.

A little more than six months later, at its OpenWorld conference in November, Oracle announced the AIA Foundation Pack—the enter-prise business objects, services, SOA (service-oriented architecture) governance tools and reference architecture that enable customers and partners to use AIA to integrate processes and

> ### 'The important thing is not that we have best-of-breed, but that our customers have them.'
>
> —PACO AUBREJUAN

build process-based composite applications.

Fast-forward to February: Oracle is scheduled to release its Foundation Pack "any day now," said Paco Aubrejuan, vice president of application strategy at Oracle.

With the introduction of the Foundation Pack will come a fundamental question about AIA: Is it a product that can fundamentally change the way customers and partners build process integrations—and the way applications are developed within Oracle, as Aubrejuan suggested—or is it just another name for Fusion Middleware?

The answer may lie somewhere in the middle.

According to Oracle documents, the Foundation Pack provides users with a "proven reference architecture and reusable Web services allowing you to create integrations across any applications, leveraging a standards based, service-oriented architecture."

Minus the Web services, which Oracle had promised several years ago, the Foundation Pack could well describe Fusion Middleware. But there is a big difference between it and AIA, according to Aubrejuan.

"Fusion Middleware is absolutely the tool we use in AIA, but just having a BPEL [Business Process Execution Language] engine doesn't mean the applications we deliver work together," Aubrejuan said. "You can code logic in BPEL, but [if you don't have] a common definition for 'order,' you haven't abstracted any of that away."

"AIA is how we define objects, how to extend objects, what technology we use to do certain functions between applications," Aubrejuan said. "We're changing fundamentally how the best-of-breed [applications] work. The important thing is not that we have best-of-breed, but that our customers have them."

Because of its massive acquisition appetite—Oracle has bought some 40-plus companies in about as many months—the company has found itself in a unique position.

Several years ago, at conferences and in keynote addresses, Oracle co-founder and CEO Larry Ellison said an Oracle customer straying outside the confines of E-Business Suite to embrace a best-of-breed strategy was akin to an airline using best-of-breed parts to build a 747—slapping together wings from one company and an engine from another company.

A humorous clip from an early 2000 OpenWorld showed an airline doing just

that; as passengers board a plane, a wing falls off.

Subsequently, Oracle proceeded to buy numerous software companies. Oracle has rationalized its software purchases by promising customers a unified code base through Fusion Applications. (Version 1.0 is expected this year.)

In the meantime, Oracle has built up its Fusion Middleware strategy and portfolio with a two-pronged approach: that Fusion Middleware would help companies integrate Oracle—and other—applications using SOA methodology, standards and technology and that it would be the underlying platform for Fusion Applications, which would make it easier for customers using Fusion Middleware to migrate from their old applications to the next-generation suite.

However, the future-tense development strategy left customers in a present-tense quandary, according to Aubrejuan.

"[Customers said,] 'Help us, not by starting with the future, but by starting with what we have today,'" he said. "That's really where AIA came into the picture—to define an architecture that standardizes how applications work together, so it's not just technology but an application perspective."

"So we very specifically defined business objects—common standard definitions—that allow customers to integrate not just Oracle applications but outside apps and homegrown apps," he said.

It's a concept customers are thrilled about, though they say that it's a little vague.

"My understanding is that Fusion Middleware is the platform, and AIA is the processes," said

Joshua Greenberg, project manager at Subaru of America, which has E-Business Suite, Siebel CRM and G-Log Transportation Management applications from Oracle. "My hope is that Oracle is going to provide that gratis. If you have a number of Oracle products ... there's a lot of value in finding those integration points. It's easier to market, quicker to value and makes our users happier."

But industry analysts are less enthusiastic, not so much in what AIA might be able to accomplish with process integration, but in its

Anatomy of AIA

Oracle's offering includes:

▶ **Enterprise Object Library** Defines representation of business entities such as sales orders, purchase orders, items and invoices

▶ **Enterprise Business Services** Web service definition for performing a business task

▶ **SOA Governance** With Business Service Repository and Composite Application Validation System

▶ **Composite Application Error Management and Resolution** To manage errors in integration layer

▶ **Reference Architecture** Concepts and Technologies Guide, Integration Developer's Guide

▶ **Fusion Middleware** Technology that puts AIA methodologies to work

Source: eWEEK reporting
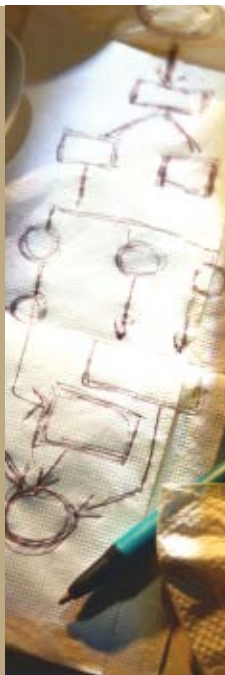
feasibility as a product.

"AIA doesn't exist," said Bernstein Research analyst Charles Di Bona.

With the growing number of disparate applications under the Oracle umbrella—Oracle just keeps adding to the list with more acquisitions—Enterprise Applications Consulting principal Joshua Greenbaum said the AIA strategy is more strategic internally than it is externally.

"For [Oracle] to keep all these customers happy with new functionality and innovation, one way they can do

that is stick AIA in the middle and say, 'Here's the black box,'" Greenbaum said. "It makes G-Log work with E-Business without having to maintain integration points. If AIA can't do that, the whole strategy falls apart. It's a real keystone for [Oracle's] strategy."

Greenbaum said that to be successful, AIA has to be "very extensive" with industry and data models that are "very, very fast" so that integration happens in as much a real-time fashion as customers expect (versus batch-type processing).

"Oracle definitely needs to get customers to buy this," Greenbaum said. "Without this piece of technology, the long-term strategy just doesn't work. My understanding is customers are very interested. They're saying, 'Give it to us now, give it to us yesterday.' Clearly there's a demand. But if the product isn't there today, there's an execution issue."

Aubrejuan admitted to initial stumbling blocks with the AIA strategy.

"The challenge we had at first is we only had Process Integration Packs," he said. "The story is not the PICs themselves, but how it's being done. We didn't have the Foundation Pack. We were only talking to customers where they had a specific need—when they had to edge applications from us [that needed integration]. When I go and talk to customers, I spend most of [my] time on AIA because it really helps them. Anyone with a global picture really understands.

"It's getting there," Aubrejuan continued. "In five years, [AIA] will be the only way things are built and deployed. Applications will be deployed from the middleware out. It's still early." *e*

Economic worries hitting IT professionals

NEW REPORTS HIGHLIGHT THE TOLL THAT FINANCIAL PROBLEMS ARE TAKING ON TECH SALARIES AND WORKER CONFIDENCE

By Deb Perelman

SUGGESTING THAT THE CREDIT sector's financial woes are creeping up on technology professionals, two new reports highlight waning IT confidence and sliding IT wages in recent months.

Triggered by lower hiring expectations and financial concerns, IT worker confidence declined for the fourth consecutive month in January. The confidence index, as measured by Hudson, a recruiting and staffing company, found that the number of employees who described their finances as "excellent" fell 5 percent in January to a low of 14 percent.

There was an additional 5 percent drop in the number of IT workers who said that their finances were improving. Though holiday spending may have played a role in waning IT confidence—57 percent of IT workers reported that holiday-related expenses were making it more difficult to pay their bills in December—other numbers suggest that there are bigger issues at hand.

Only 25 percent of IT workers said they expected their companies to increase head count in January, a 3 percent drop from December.

Meanwhile, according to a report released by careers site Dice, technology professionals received much smaller pay raises in 2007 than they did in 2006. While IT salaries increased 5.4 percent in 2006 (to $73,308), they grew by only 1.7 percent in 2007 (to $74,570).

The credit crisis affected IT workers in the banking and financial services sector—these workers received only a 0.6 percent increase in 2007 after an 8.5 percent increase in 2006.

IT managers, including project managers and IS managers, received the biggest salary increases at 5 and 7.8 percent, respectively. However, IS managers had actually taken a slight (about half a percent) salary hit between 2005 and 2006. *e*

How to spend (and not bust) your 2008 IT budget

WITH UNCERTAIN ECONOMIC TIMES AHEAD, IT'S IMPORTANT FOR IT DEPARTMENTS TO OPTIMIZE PROCESSES AND SCRUTINIZE NEW EXPENDITURES

By Karen D. Schwartz

WITH IT BUDGETS RE-maining essentially flat for 2008 and uncertain economic times ahead, it's more important than ever to make sure you don't overspend on IT.

Ray Wang, an analyst at Forrester Research, said economic uncertainty should change the way people think about IT budgets and projects.

During economic upturns, for example, the business driver for projects tends to focus on top-line growth and strategic investments.

But given the pending downturn and increasing regulatory pressure, Wang said companies should expect projects to focus on operational efficiency and compliance.

"Expect commoditized processes to be [optimized], varying instances to be consolidated and standardization on middleware platforms," Wang said.

In addition, companies should prepare to invest in compliance, analytics and master data management while undertaking more collaborative-type projects with suppliers, customers and partners in an attempt to increase efficiency, he said.

PAUL CONNOLLY

Given the market's uncertainty, it's especially important to scrutinize your upcoming expenses and get your priorities in order quickly, said Anne McFarland, director of data strategies and information solutions for The Clipper Group.

That means focusing on the overall organizational effectiveness of the business and investing in technology to further that effectiveness.

"Develop a prioritized list of what is needed to make your organization work better, in business terms, before you talk to vendors about what they want to sell you," McFarland said.

"If you get your house in order, your business will be in a position to avoid the ill-guided initiatives that drain budgets dry and empty promises that drive customers and partners to look elsewhere," she said.

One of the most important, economically friendly and efficient ways of managing scarce IT dollars, especially for smaller businesses, is turning to third-party application deployment, IT services and maintenance. Using these options means less technical knowledge needed

Alternative Thinking About Reliability:

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IT strategies that can save big bucks

eWEEK RECOMMENDS SEVERAL TECHNOLOGY
AND BUSINESS MODELS THAT CAN HELP COMPANIES
WEATHER BAD ECONOMIC TIMES AND STAY COMPETITIVE

By Karen D. Schwartz

FOR COMPANIES THAT AREN'T flush with cash—and for any company girding for an economic downturn—it's important to keep on top of technologies that save money, both in the short and long term. Here are some of the technology and business models that are considered to be among the best at helping companies retain their hard-earned profits:

Unify communications. With the ability to combine VOIP (voice over IP), instant messaging, e-mail, cell phones and PDAs into a system of real-time communication, efficiency improves and customer satisfaction rises. The concept is so hot that the Computing Technology Industry Association reports that two-thirds of businesses with separate voice and data networks recognize the business value of converged communications solutions, and 17 percent have already taken the plunge.

Virtualize. Virtualizing servers solves problems in the data center. Virtualization can help in creating highly available servers, improving disaster recovery and consolidating redundant equipment.

And there's plenty to consolidate.

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According to IDC, businesses will spend $20 billion on server hardware between now and 2010. Sixty-eight percent of that will be spent on servers partitioned for virtualization; the number of virtual servers is expected to grow by 41 percent CAGR (compound annual growth rate) over the same period.

It's that consolidation that really saves money: By running systems on fewer servers, businesses reduce equipment and IT labor costs, as well as power and cooling costs. Other cost savings include software license reductions in areas such as anti-virus, backup and operating systems.

Outsource. Even companies with just a few hundred employees can bene-fit from offloading tasks, allowing them to focus on core business and removing maintenance and equipment costs.

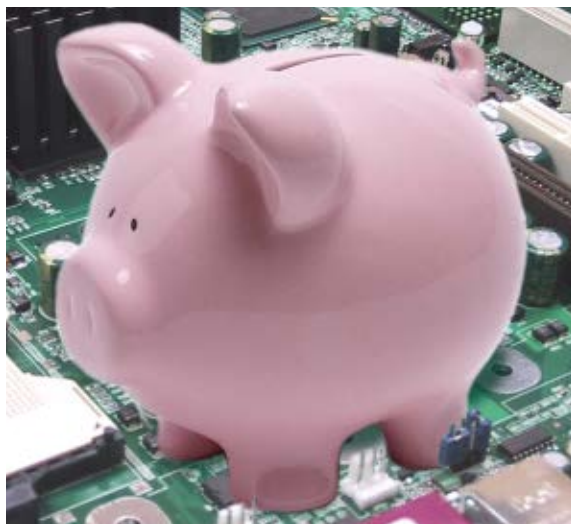One area of potential outsourcing is IT services, in which a hired company offers unlimited technical support for a fixed cost. Another area is managed security services, in which a company handles every aspect of security for a company, from identity management and dealing with denial-of-service attacks to firewall services and managed desktop security. And, of course, there is always the increasingly popular SAAS (software as a service) model.

Go green. Green-friendly activities such as server virtualization, managing the power of office equipment and replacing CRT monitors with more energy-efficient displays also are great for the bottom line.

Although there are costs associated with going green, payback comes in less than two years, experts say.

Look outside. Sometimes admitting that you can't do it all yourself can save real money. Hiring an external consultant to evaluate a company's technology needs, for example, while not cost-free, can be well worth the price paid. *e*

BUDGETS FROM PAGE 30

in-house (possibly reducing the head count) and faster service.

One of the most prevalent third-party options, SAAS (software as a service), will continue to grow in popularity.

During the year, vendors will improve the model, adopting variants of multitenant SAAS, multi-instance software virtualization and on-demand hosting. At the same time, competition will spur vendors to improve pricing models, causing the entire model to become even more competitive and cost-effective, Wang predicted.

When evaluating how a third party might help maximize your IT dollars, don't discount third-party software maintenance vendors. It's a growing trend, despite competitive pressures from large vendors to stymie third-party maintenance vendors, Wang said. *e*

More money-saving strategies

▸ Understand your company's operations plans

▸ Aggregate purchases by partnering with other companies for group buys or buying in quantity. (But, given economic uncertainties, it's best to keep bulk or group buys on the spare side.)

▸ Choose products you know will work together, either because they come from the same company or come from different vendors whose products have a history of working well together.

IT INDUSTRY ANGLES FOR SLICE OF STIMULUS PACKAGE

U.S. SEN. JOHN ENSIGN HOPES TO GIVE TECHNOLogy industries a boost in the economic stimulus package before the Senate. Under a proposal by the Nevada Republican, corporations doing business overseas would receive a large tax break for reinvesting foreign profits in the United States.

Currently, those profits are taxed at a 35 percent rate. Large corporations such as Microsoft, Intel and Hewlett-Packard that operate foreign subsidiaries have been reluctant to bring overseas profits home, Ensign contends, because of the large tax bite. Ensign wants to lower that rate to 5.25 percent for one year.

"If we lower the tax rate, they would bring the money back [into the U.S.]," Ensign said Jan. 30 during the Senate Finance Committee debate on the stimulus package.

Ensign pointed to a similar measure he authored as part of a 2004 corporate tax bill. By reducing the tax on foreign profits, more than $200 billion was "repatriated" back into the country. "We can do it again, and we can do it in the next 60 days," Ensign said.

The House on Jan. 29 approved a $146 billion stimulus package negotiated with the White House. At a press conference, House Speaker Nancy Pelosi and Republican leader John Boehner urged the Senate not to add new provisions that could delay getting the legislation to President Bush's desk by Feb. 15.

By hitting that target date, Pelosi and Boehner said, the government could begin sending rebate checks to approximately 111 million Americans by June. The House bill would authorize rebate checks of as much as

"We can do it again ... in the next 60 days," Ensign said.

$600 for individuals and $1,200 for couples. Families with children would receive checks for $300 per child.

The House package also expands investment tax breaks for business and adds capital to the mortgage market by allowing Fannie Mae and Freddie Mac to buy mortgages above the current federal limit.

"It's important that the package not get overloaded," Pelosi warned. "Let's hope that the Senate will take its lead from us and be disciplined."

But Senate Finance Committee Chairman Max Baucus indicated he favors smaller checks to more people, including millions of senior citizens that Baucus said were left out of the House package. The Joint Committee on Taxation said Baucus' package would cost $161.3 billion.

In addition, other Democrats, including presidential candidate Hillary Clinton, want to add $5 billion to the package for transportation-related projects. Sen. Maria Cantwell also wants the package to include energy tax incentives that the Washington Democrat claims would stimulate $20 billion in 2008.

Bush echoed Pelosi's and Boehner's concern that the Senate add-ons would delay passage of a stimulus package.

"The temptation is going to be for the Senate to load it up," Bush said in a Jan. 29 statement. "We need to get this bill out of the Senate and on my desk so the checks can get in the hands of our consumers, and our businesses can be assured of the incentives necessary to make investments." —*Roy Mark*

Is your IT job safe?

By Deb Perelman

The U.S. economy appears to be hovering on the edge of a downturn. What IT skills will be at greatest risk? Will IT departments be leveled, as they were during the dot-com bust? eWEEK asked experts in the field to rate the security—and insecurity—of different facets of the IT department.

NETWORKING SKILLS

As the IT department has become increasingly responsible for supporting a remote work force through BlackBerrys, Treos and other smart phones, the need for networking skills has become nonnegotiable.

"Networking skills had been No. 2 in previous hiring index results and recently took over top position," said Cameron Heffernan, a recruiter for Robert Half Technology.

BUSINESS-FACING ROLES

Even in a recession, companies need to grow and keep their customers happy, said Jim Lanzalotto, vice president of strategy and marketing for Yoh Services, a talent and outsourcing company. Project roles related to customers and company growth are "less susceptible to recession angst," Lanzalotto said.

"We're projecting even higher IT requirements in meeting business priorities," Lanzalotto said. "We're seeing much more effort around IT/business projects and less around operations."

QUALITY ASSURANCE TESTING

Companies cannot afford to put out faulty products. "As we continue to develop more and more products, they have to be tested," said Greg Gary, managing director for Spherion. "There was no bigger scare than Y2K, [and that showed] problems that can come up when there is oversight."

IT SECURITY SPECIALISTS

Ensuring IT security is nonnegotiable in enterprises. IT security is "not just a nice-to-have technology, but one that is mission-critical," said Yoh Services' Lanzalotto.

"Companies—especially those within the financial industry—are not going to cut back on IT security," said Spherion's Gary.

CONSULTANTS

On the one hand, consultants could be brought in to fill gaps if full-time employees are laid off. But Forrester Research analyst Andrew Bartels warned that CIOs are very reluctant to cut full-time staff—especially employees who work on R&D—which means scaling back on special projects and the consultants who work on them instead.

LEGACY PROGRAMMERS

A recession could be just what it takes to get enterprises to expedite plans to move past systems that cost too much for what they are delivering.

"It is fairly clear to us that those that are the most vulnerable are involved in upgrading or maintaining assets that are beyond their period of depreciation, such as legacy systems," said Gartner analyst Andrew Walker.

SYSTEMS ADMINISTRATORS

Virtualization may put many systems administrators out of work in the long run, but a recession could speed this process up.

"Virtualization and other software management technologies will help reduce the number of people who need to man the machine," said Forrester's Bartels.

IT MANAGERS

What will put any IT manager's neck on the line is redundancies, as these are the first things companies cut when they have to scale back their spending. "[Companies are] not going to have two or three individuals doing a job if they can avoid it," said Technology Business Research analyst Josh Farina.

HELP DESK

CIOs will look to positions that have historically been susceptible to offshoring. "[CIOs will] be asking, 'Can we outsource? Can we get it for a lower cost?' With so much help and support services being offshored, there is a lot of risk in these roles," Farina said.

YOU

Don't fall within any of the categories above? Multifaceted, skilled pros—such as tech generalists who can call on skills in a large number of areas—are much more marketable than those who work within a niche.

Microsoft's IP telephony spectrum

VOIP, unified communications platforms don't intersect significantly—yet

By Andrew Garcia eWEEK LABS

IN THE LAST QUARTER OF 2007, Microsoft burst onto the scene with a pair of products that launched the company into the voice-over-IP and unified communications markets. These products, although aimed at opposite ends of the marketplace, share the common theme of leveraging software to foster improved communications for clients.

Released in October, Office Com-munications Server 2007 builds upon Microsoft's Exchange Server and Office environments to offer users a PC-oriented solution that brings together voice-, video- and text-based communications with real-time presence and collaboration capabilities (see review, Page 36).

Microsoft followed that with the November release of Response Point, a low-maintenance, Windows XP Embedded-based appliance providing basic VOIP features and functions for companies looking for an affordable, more traditional telephony solution (see review, Page 37).

"On the Office Communications Server side, we really focused on the information worker as the primary audience," said Eric Swift, senior direc-tor of product management for Micro-soft's Unified

PAUL CONNOLLY

Microsoft reaches UC goal

REVIEW: OCS 2007 corrals communications but requires heavy infrastructure

By Andrew Garcia eWEEK LABS

MICROSOFT HAS BEEN SEEM-ingly inching toward uni-fied communications for years, but with Office Communica-tions Server 2007, the company is finally there.

By integrating VOIP (voice over IP), videoconferencing and instant messaging in a single click and with a familiar user interface—while layer-ing on unified mailbox and collabora-tive work sessions—Microsoft has put together a compelling com-munications and collabora-tion solution, particularly for companies that are already heavy users of Microsoft infrastructure components.

For users at such organi-zations, the UC tools could not be much more familiar. OCS bakes real-time presence information into Office (ver-sions 2007 or 2003) and Office Communicator 2007, allow-ing users to trigger commu-nication sessions directly from their contact lists, e-mail mes-sages, shared documents and more.

OCS also allows users to easily navi-gate among communication modalities, with the ability to view other users' status across the enterprise to gauge the most effective communication mode.

For example, User A may see that User B is marked "Away," so User A sends an e-mail to User B instead of an IM. User B returns and sees that User A is present. User B responds to User A's e-mail with an IM, at which time User A upgrades to a voice or video call with User B. Each conversion takes only a click or two per user. Likewise, callers can upgrade a two-party call to a full-fledged conference with a mini-mum of clicks, and new parties will get invited automatically via e-mail.

Once in conference, the system has the intelligence to put the focus where it needs to be. For instance, in a videoconference, the video image represents the person actually speak-ing at the time, and it will shift as the conversation moves from person to person. In addition, conference participants can share documents or applications, and the conference
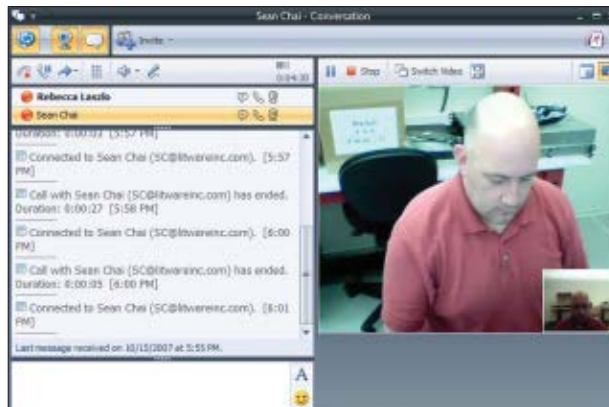

During a video call, the person you're talking to shows up in the main screen while your image is in the small screen at bottom right.

lead can pass application control to other parties as needed.

All this experience is meant to occur directly from the PC, with no need for a desktop phone at all. I tested OCS using a variety of off-the-shelf Web-cams and USB headsets, but Micro-soft also provided a few accessories designed specifically for use with OCS: a USB handset called the Catalina and the Polycom Communicator C100 personal speakerphone, both of which provide minimal controls for picking up or dropping calls from the respec-tive device itself. Still, the lion's share of control is performed on the desktop.

Microsoft's Exchange Server 2007, which provides unified mailbox capa-bilities, is required by OCS on the back end. Users can access all their messages from one location now, with the ability to listen to voice mail directly from the computer (no punch-ing codes into the phone) and return a call directly from the message itself. Exchange Server 2007 also can archive Office Communicator chat sessions.

OCS lets users check in from PCs that do not have Office 2007 installed via the OCS Communi-cator Web Access server role. Users log in to a Web server to gain access to a Web-based Communicator, which provides the ability to search for users through-out the organization. While users cannot make VOIP calls through this interface, they can initiate IM sessions with other users and for-ward incoming calls from their office extension to a convenient telephone num-ber (such as a cell phone).

OCS is licensed in both Standard and Enterprise editions. The Enterprise edition is for companies looking for high-availability clustering and costs $2,790 per server, plus $698 for one year of Software Assurance. Standard OCS licenses cost $488 per server, plus $122 for one year of Software Assurance. The real costs will likely start adding up when you include the Office Communications Server CALs (client access licenses) and External Connector Licenses that will need to be purchased for users participating in audio, video or Web conferences. (Note: Prices do not

Response Point answers call

REVIEW: Microsoft's VOIP system for SMBs boasts easy-to-use features

By Andrew Garcia eWEEK LABS

MICROSOFT'S VOIP SYSTEM for SMBs boasts a few glitzy next-generation features that make the system incredibly easy to use, and it comes in an appliance form factor that makes the system a snap to deploy.

In his keynote speech at International CES in Las Vegas, Microsoft Chairman Bill Gates indicated that a primary focus during the next digital decade will be to connect people, and that key elements of these experiences will be high-definition media, superior network connectivity and natural user interfaces.

When held to this standard, Microsoft Response Point, the company's new VOIP (voice over IP) software platform for small and midsize businesses, certainly delivers on the last of the three criteria, boasting a natural user interface on a scale I've not seen from any VOIP system—no matter the cost or target audience.

Each Response Point phone has a blue Response Point button which, when pressed, allows the user to place calls (internal or external), check voice mail, or park, transfer or conference calls by verbally telling the system what to do. It's a stunning use of speech recognition technology that is brain-dead simple to learn.

Additionally, the system can be used to answer certain common real language questions automatically. For instance, Response Point will tell incoming callers the office hours, whether they ask "What are your hours?" or "What time are you open?" or numerous other variations of that and a couple other questions.

As for the other two areas of focus that Gates cited, Response Point falls short. The system uses only the G.711 codec, which delivers decent, but not high-definition, call quality. Using Network Instruments' Observer 12, I found calls recorded consistent R-factor scores around 84.070 (translating to a 4.170 mean

Response Point-based appliances include those from Quanta Syspine.

opinion score). And because G.711 uses more bandwidth than other common codecs, Response Point is not really viable as a VOIP solution for remote users with slower WAN connections, so it lacks the connectedness to which Gates referred.

Overall, the call applications that Response Point provides are pretty straightforward. The system supports Call Transfer, Conferencing, Park and Hold. The single auto attendant prompts incoming callers to find names in the system directory, or companies can defer the use of an auto attendant in favor of a receptionist. Voice mails can be obtained over the phone or e-mailed to the user as a WAV file.

The hardware

MICROSOFT HASN'T DELIVERED Response Point as software for customers to install on Windows Server. Rather, they have created a software platform built atop Windows XP Embedded for hardware vendors to install and sell on their own equipment, so each vendor's iteration of Response Point will be a little different.

I tested Quanta Syspine's version of Response Point, the Syspine Digital Operator Phone System A-50. D-Link also offers a Response Point-based solution called the DVX-2000MS (and that hopefully means the end of the line for D-Link's disappointing DVX-1000). Aastra should also be selling a Response Point system sometime this year.

The base price of $2,500 buys one A-50 appliance and four Syspine phones. At $625 per user, the initial costs may seem high compared with small-business-oriented solutions from Allworx or one of the purveyors of open-source-based solutions. However, there are no additional per-user licensing fees, so the per-user cost will drop dramatically as customers approach the system capacity of 50 users. Simply buy a new phone (Syspine's costs $159) and plug it into the network.

Microsoft is also offering financing terms so customers can spread the upfront cash outlay for the system over the course of three years.
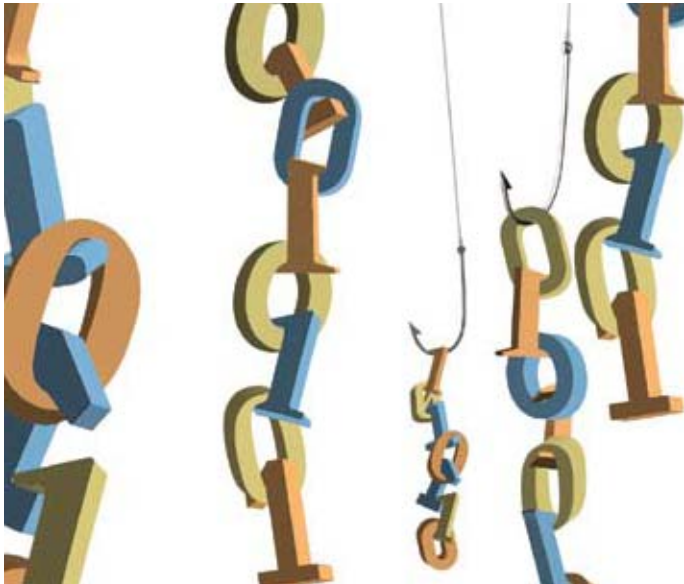
The A-50

OCS FROM PAGE 36

include the costs for Exchange Server, Office or SQL Server.)

Integration

MICROSOFT CURRENTLY SUPPORTS TWO avenues of integration with SIP (Session Initial Protocol)-based gear.

PSTN gateway devices bridge calls between the SIP-based telephony network and the analog PSTN. In addition to the AudioCodes equipment I tested with, OCS can work with PSTN gateways from Cisco Systems, Dialogic, Network Equipment Technologies and Quintum Technologies.
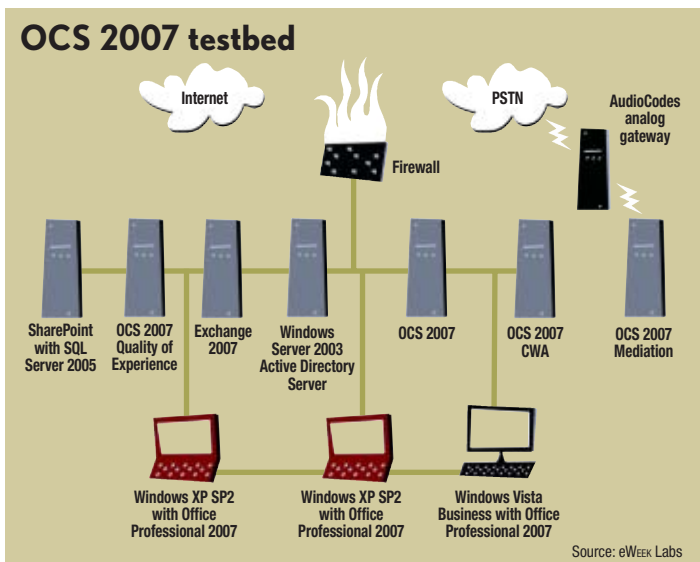
OCS also integrates with certain IP PBXes.

Enterprise customers that are not ready to perform a forklift replacement of existing telecommunications equipment in favor of OCS—either because the existing system has not reached its end of life or because OCS does not provide all the enterprise telephony features expected from a voice system—may want to investigate OCS' PBX integrations to marry OCS' desktop functionality with existing desktop phones and back-end systems.

At this time, Nortel Networks is the only third-party PBX vendor qualified to work with OCS. However, the integration happens via SIP, so other solutions may work to some extent.

As I saw in person at Nortel Networks' facility in San Ramon, Calif., a Nortel CS1000 PBX—running the most up-to-date code—supports dual forking with remote call control. This means that a Nortel phone and an

OCS 2007 testbed

Internet — Firewall — PSTN — AudioCodes analog gateway

SharePoint with SQL Server 2005 | OCS 2007 Quality of Experience | Exchange 2007 | Windows Server 2003 Active Directory Server | OCS 2007 | OCS 2007 CWA | OCS 2007 Mediation

Windows XP SP2 with Office Professional 2007 | Windows XP SP2 with Office Professional 2007 | Windows Vista Business with Office Professional 2007

Source: eWEEK Labs

RESPONSE POINT FROM PAGE 37

appliance supports up to eight analog trunks, as the appliance has two 4-port FXO (Foreign Exchange Office) banks, whereas D-Link requires a separate analog gateway appliance. The appliance also has one Gigabit Ethernet connection, three USB ports (for as-of-yet undefined future expansion) and an audio-line-out port. The appliance also features a detachable LCD faceplate that shows some status and network information.

The Syspine appliance is entirely solid-state and fanless, so there are no moving parts—removing one of the primary concerns about other, PC-oriented small-business PBX appliances.

The Syspine phones have 23 buttons, including preprogrammed keys for hold, voice mail, speakerphone and the Response Point speech recognition

capabilities. Each phone has two network connections—for the LAN and a PC—and the LAN port supports 802.3af Power over Ethernet.

The software

RESPONSE POINT IS MANAGED VIA A Windows application called Response Point Administrator. When a phone is connected to the network, the administrator must use this application to assign a user (and an extension) to the phone. Multiple users may be assigned to the same phone as well, though only the primary is listed on the phone screen.

The main Administrator screen shows the current status of all users, phones and trunks. There is also a more detailed event log, as well as system status screens for network settings, system uptime, CPU and memory utilization, and storage usage (which is affected by stored contacts and voice mails).

Meanwhile, Response Point Users interact with the system via a Windows application called Response Point Assistant. It is not a VOIP soft phone, so users can't place or take VOIP calls using the PC. Rather, it is just a partnering control application for users to customize their experience. *e*

Response Point offers simple reports and a more detailed event log.

Communications Group.

"The ability to find who you want to communicate with, then to reach out and connect with them using the form of communication that is most effective—that was first and foremost in our design points," Swift said.

"Regardless of where people are located and what device they are on, you are going to initiate conversation depending on what you need to talk about and not be dependent on a specific device or technology type," he said.

Swift indicated that OCS customers to date generally have more than 500 seats, usually extending into the thousands. The initial version of OCS, he said, is optimized for these larger organizations that are looking to collaborate across multiple locations, geographies and networks.

With Response Point, on the other hand, the target audience is dramatically different, with the focus on small businesses in the under-50-users set. "[Our focus] was the small-business owner that needed essentially their first phone, and they needed it to be very simple—basically, to provide phone service," Swift said.
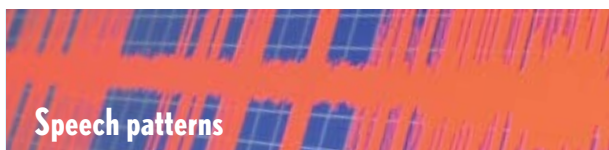
"We needed to take the basic phone

Speech patterns

Both Office Communications Server 2007 and Response Point use speech recognition technology but in very different ways, depending on what Microsoft views as the requirements of the target audience.

Response Point

▶ **Requirements** Users need to perform simple commands—such as dialing contacts, transferring or parking calls, and checking voice mail—using only their voices.

▶ **Objective** Make it dead simple. Remove the complexity of figuring out how to do some of these tasks from the traditional telephone handset's keypad.

OCS 2007

▶ **Requirements** Users need to connect with Outlook to have e-mails read back to them and to verbally interact with the Calendar.

▶ **Objective** Enable the information worker to collaborate and communicate more effectively. The speech engine has a development platform with APIs available for application development.

Source: eWEEK Labs

call features and add on to that a couple of the innovative features so that it is easier to administer from a setup standpoint and easier for a user to do basic call functions," he said.

With these differing points of emphasis, the two products are worlds apart in terms of features, architectures, platforms and licensing complexity. Even in the areas where there could be opportunity to standardize the user experience across platforms, Microsoft has chosen not to go that route at this time.

During my tests of the two products I found that some technology is shared between the products, but in dramatically different ways. For example, speech recognition is offered in both products but is used for very different purposes (see chart). Microsoft officials say they plan to watch both product lines to see what works for users and what does not—and where the lines should cross. *e*

OCS Communicator session can share a twinned extension—one that rings through in both places, allowing a user to seamlessly move from one device to the next, with OCS' presence capabilities being aware of activity on the PBX extension.

Quality control

BECAUSE OCS VOICE AND VIDEO calls are encrypted by default, network administrators will be able to glean only a limited amount of QOS (quality of service) information from standard network-based VOIP monitoring tools. To overcome this shortcoming, Microsoft produced the OCS Quality of Experience Monitoring Server role to help administrators monitor ongoing network experience with insight gleaned from within the system.

Instead of viewing packets strictly from a network perspective, the Monitoring Server aggregates data from the primary call control servers (which cull data from the endpoints) and from the Mediation Servers (to monitor calls to and from the PSTN). This data is collected in the Monitoring Servers' SQL Server database, which can be queried using prepackaged Web-based reports.

The reports are broken out according to avenue (PC-to-PC calls, PSTN-to-PC calls, PC-to-PSTN calls and conference calls) and provide several different MOSes (mean opinion scores) to represent incoming and outgoing sound quality, among other assessments. The reports also provide information on metrics such as codec used, packet loss, packet reorder, packet errors, jitter and even the endpoint device in use.

Since OCS by default uses Microsoft's RTAudio codec—which operates as either a high-definition wideband or narrowband codec, depending on network conditions—all reported MOSes are based on the richer experience expected from a wideband call. Therefore, an in-network call between two people on the same subnet may get the maximum MOS of 4.1 (using a wideband codec), while a call to the PSTN using a narrowband codec (as that's all the PSTN will support) will get only a score of about 2.5. Consequently, network administrators will need to be retrained in the new scoring criteria applicable for high-definition audio.

The full review of OCS is online at eweek.com. *e*

ERIC LUNDQUIST

Campaigning for answers

Candidates should address technology's role in this economy

BY THE TIME YOU READ this, the Super Tuesday primaries will have come and gone and the presidential campaigning will be in seriously high gear. While the candidates seem to have done a decent job of courting high-tech campaign dollars, it seems to me there has been little discussion of what role technology companies should play in an uncertain economy. Here are some questions that IT professionals should be asking and candidates should be answering:

Where is the best place to apply government dollars to get the biggest technology return? There is no easy answer. Local governments often seem enamored of creating tax breaks to lure companies to their area. Universities and think tanks look for basic research funding. Venture capitalists seek tax breaks so they can keep more profits from their winning bets and write off more of their losing bets.

I don't have perfect guidance on this, but providing a means for recent college graduates to pursue their ideas for startup companies without the risk of losing their ownership to investors seems a good place to start.

Providing facilities where ideas can be incubated and living expenses won't break the bank may be a good alternative to funding research that could take 50 years to mature or cutting deals with companies that may have to close up shop at the first sign of a downturn.

How do you balance a company's right to locate in an area where the work force offers the best cost

Where's the best place to apply government dollars for the biggest IT return?

and experience trade-off with providing for workers caught on the wrong end of the equation? This is probably the hottest live-wire issue in technology. Again, there is no magic answer, but allowing companies unfettered freedom to shift jobs offshore without bearing some responsibility for U.S. workers left jobless is just plain wrong.

What's the big idea? The biggest advances in technology have often come as a result of the nation's leaders taking on a great challenge. The challenge can be as threatening as World War II or as far-reaching as getting the first astronaut to the moon. Whether you believe in reducing oil and gas consumption because you are an environmentalist or because you're concerned about a country that doesn't own the source of its economic well-being, replacing our reliance on gas and oil is one of those big projects that needs doing. Political discussion about increased drilling or handing out plaques at a solar-panel plant does not fit into the category of big responses to big problems.

Those are some of the questions I think are worth asking the candidates in this year's elections. I'm interested in hearing some of your answers and additional questions. *e*

Editorial Director Eric Lundquist can be reached at elundquist@eweek.com.

JIM RAPOZA

Patent reform still elusive

Minerva's patent award shows little progress has been made

IN RECENT MONTHS, THERE'S been a lot of talk about patent reform. On top of that, last year saw a major Supreme Court decision that should make it much harder to get and hold patents based on ideas that were clearly obvious to practitioners in the given technology field. But so far, it looks as if all this talk about reform and improvements has been just that—talk.

That's because, when it comes to stupid, damaging and overly broad patents awarded by the U.S. Patent and Trademark Office, recent evidence shows it's still business as usual. And On Jan. 22, the USPTO outdid itself by granting a whopper of an overly broad and obvious patent. In terms of potential damage to technology markets, this one looks nearly as bad as British Telecom's patent claim to hyperlinking in the mid-1990s.

The company awarded this patent is Minerva Industries. Minerva holds patents on everything from cell phones to car seat belts. But cell phones are the key area in the recent patent that Minerva received. And the company's patent claim is a doozy.

The patent that the USPTO awarded to Minerva is for a cell phone that connects to the Internet wirelessly, has a camera and microphone, uses memory cards, can play and manage multimedia files, and does everything else that smart phones have been doing for more than 10 years.

So basically it is the king of overly broad patents and essentially applies to every cell phone in existence today. Within minutes of getting the patent, Minerva filed lawsuits against pretty much every major player in the smart-phone market,

The USPTO outdid itself by granting a whopper of an overly broad patent.

including Apple, RIM, Nokia, Sprint and AT&T.

When you look at the potential damage this patent could cause, it boggles the mind: It could easily dwarf that of the NTP patent that nearly shut down RIM's BlackBerry system.

Strangely, no one has paid much attention to this patent so far. Maybe it's because we've all become so used to stupid patents getting awarded. Maybe it's because it seems so obvious this patent will get thrown out. From a prior-art standpoint,

it sure looks like it should. It took me only minutes to find articles from 1996 and earlier that discussed smart phones that did everything the Minerva patent (which was filed in 2000) claims. Heck, I tested and used smart phones that did most of these things before 2000.

But just because a patent seems likely to be thrown out doesn't mean it will happen. Everyone, including the USPTO, said the NTP patent should be thrown out, but that didn't stop RIM from having to pay out more than $600 million just to stay in business.

So instead of enjoying the fruits of technical innovation and looking forward to new and exciting products, we have to once again watch valuable resources and effort being wasted to fight a patent that should have never been granted. *e*

Chief Technology Analyst Jim Rapoza can be reached at jrapoza@eweek.com.

DEBRA DONSTON

Virtualization: Survey says ...

An eWEEK survey shows virtualization is delivering on promises

IT SEEMS LIKE YOU CAN'T READ an IT story these days without seeing the word "virtualization" in it. And, like all good buzzwords, "virtualization" is being applied by vendors and product marketers to products that have no real connection to the technology.

So, what's the real story? How is virtualization really being implemented in the enterprise, and how has the experience been?

We asked those questions, among many others, in the latest of what will be monthly surveys of eWEEK readers (conducted by Ziff Davis Enterprise Editorial Research). Here are some top-level take-aways.

VMware is the clear leader in server virtualization, but many are counting on Windows Server 2008's virtualization capabilities. At companies with 500 or more employees, about 74 percent are using VMware ESX Server for their virtualization needs. However, 23 percent said they will be using the built-in virtualization capabilities in Windows Server 2008, which just RTM'd (see review, Page 20). Eleven percent (respondents could choose more than one platform) said they

are counting on Xen.

Creating efficiencies is the No. 1 reason for implementing virtualization. When asked to name the single most important reason for implementing virtualization, "lowering hardware costs," "improving server virtualization rates" and "reducing server sprawl" each were selected by about 20 percent of respondents at companies

with 500 or more employees. Only 2 percent of respondents picked "lowering staff costs for server management" in answer to this question, and less than 1 percent picked "simplifying security issues."

Indeed, now that more and more companies are embracing virtualization, one of the issues we're seeing is the challenge of managing and securing all of these virtual instances. eWEEK Labs Technical Director Cameron Sturdevant is currently evaluating products

and processes that will help IT managers cope, and the story based on that evaluation will appear in next week's issue and at eweek.com.

Server virtualization is meeting or exceeding expectations. Despite the challenges, server virtualization is meeting or exceeding expectations more often than not, our survey shows. For example,

Expectations are being met or exceeded in time, cost, staffing and ROI.

more than 80 percent of respondents at companies of 500 or more said that their server virtualization implementations met or exceeded expectations in terms of time, cost, staffing and return on investment.

We'll do more in-depth analysis of the survey results in the near future. And we'd like to hear about your virtualization experiences. *e*

eWEEK Editor Debra Donston can be reached at ddonston@ eweek.com.

JOE WILCOX

Yahoo bid is bad news

Among many integration issues, 3 stand out

A MICROSOFT-YAHOO MERGER would be even worse than the mess AOL caused by acquiring Time Warner.

The problems are many, but three really stand out.

Microsoft will destroy the best things about Yahoo. Most of Yahoo's best technologies—including those highly efficient data centers—use open-source, free or other non-Microsoft software. Microsoft can't change its nature—it will make over Yahoo stuff in its own image, negating the best benefits from the most valuable assets.

There is too much product, service and customer overlap. For years, I've said that Microsoft's competitive obsession with Google was misplaced. Yahoo is a much bigger Microsoft competitor because of the many more places the two companies compete.

The worst kind of acquisition occurs when there is too much overlap, which is the case with Microsoft and Yahoo. (Think advertising, alerts, autos, calendaring, domains, finance, e-mail, instant messaging, localized services, mapping, music, mobile browsing/services, movie listings … I could go on and on.)

In fact, the amount of overlap reminds me of Hewlett-Packard absorbing Compaq, the only real gain of which was the elimination of a competitor. Microsoft-Yahoo is similar, methinks.

Integration will distract Microsoft and sidetrack resources. From 1998 to 2001, Microsoft lost its way, mostly because of the distraction caused by the U.S. antitrust case. That event shows how poorly Microsoft handles distraction.

Right now, Microsoft is executing better than it has in years, even considering the issues around Windows Vista. The process of integrating Yahoo would disrupt normal business and slow down—perhaps even break—a machine that otherwise is working well.

The acquisition announcement, made without the support of Yahoo's board, smacks of desperation. Microsoft is notorious for taking a build-versus-buy approach. The company buys only when it can't build something good enough or fast enough.

If Microsoft prefers to buy Yahoo, what does that say about its new services platform strategy or the state of its advertising and search infrastructure? The acquisition bid is tacit

There is too much product, service and customer overlap.

admission by Microsoft executives that they don't have confidence the company can do what's needed fast enough.

Yahoo shareholders would be foolish not to accept Microsoft's premium offer; Yahoo's board would be foolish if it did. Microsoft was foolish to make the offer, and its top executives will be fools should there be a merger. *e*

Microsoft Watch Editor Joe Wilcox can be reached at jwilcox@eweek.com.

BLOG WATCH

eWEEK in the blogosphere

Clint Boulton: Google Watch

IS GOOGLE LOOKING TO TUCK IN A SEARCH STARTUP?

A HANDFUL OF SEARCH ENGINES made their debut or introduced new products at Demo in Palm Desert, Calif.: Circos.com, Delver (formerly Semingo), HealthPricer, Silobreaker, Jodange and Eyealike, all of which have varying degrees of attractiveness to Google. I believe some have more appeal than others.

Circos.com is a social search application that gauges the content of each search and prioritizes results based on users' preferences and needs. Such a hive-mind-oriented technology could help Google better target ads for users.

Would it fit with the math-based approach Google espouses? Maybe, but while Yahoo is socializing search, I haven't seen any inclination by Google to stray from its bread and butter.

Then there's Delver, another social search product, which lets users find content and people within their own network. Delver does this by indexing social networks, blogs and apps and interfacing that content with a user's social graph to deliver targeted results.

This could be a slam-dunk both internally and externally for Google, which could use the Delver technology to support OpenSocial-based sites.

HealthPricer seems tailor-made for Google. It's a health-product information search service. Google is launching Google Health this year and has invested a lot of time and resources in this area. HealthPricer CEO Michael Brown said, "Health is the next big search area on the Web." HealthPricer's assets could dovetail well with Google Health.

Silobreaker, meanwhile, is a search and aggregation service for news, which sounds like a dime-a-dozen offering until you learn that it is trained to recognize people, companies and topics and put them in context to allow users to see what is getting the most attention in news. Google could acquire this technology to get more insight from its Google News offering.

Along analytical lines, Jodange's ToMs search software is another possibility, isolating people's opinions about topics to let users know who is most worth listening to.

This app would fit right in with Google's enterprise search products, appealing to financial and retail analysts. Interesting technology, but a little "nichey." When Google goes nichey, it tends to be for consumers.

I'd be surprised if Google alighted on Eyealike, which just launched some pretty darn accurate software that detects copyrighted copy in user-generated content. That comes after YouTube unveiled its own tool to weed out such content. Too much overlap? Perhaps, but Eyealike's copyright software is supported by the company's Visual Search Platform, which lets social networking site users search video and other pictures for content.

The winner: HealthPricer. It's too germane to what Google is doing not to come out on top, and, as sexy as the social search stuff is, there is no clear picture of how Google might leverage those assets to better serve consumers.
Posted Jan. 30, 2008 8:17 PM PST

Michael Hickins: ePiphanies

TALKING OURSELVES INTO RECESSION

D ID YOU EVER HAVE SUCH A GOOD night that you felt you had some kind of comeuppance coming to you in the morning? Or had such a string of good luck—in both love and cards—that you just knew you were riding for a fall?

Not that everyone has enjoyed such a great ride—see rising income disparities, disproportionate executive bonuses and so on—but we've been riding pretty high since 2002. Inflation has remained tame while productivity has continued to rise, and the housing market, well, the housing market ...

Now the good times have come home to roost. Or so we're told. And maybe that's exactly the trouble. Economists talk about deficits,

trade gaps (looming and otherwise) and the imbalance of rents to mortgages—and sometimes we listen too closely for our own good. After all, technology is still making us productive, and we're still creating wealth.

But they're talking, and we're listening. They started talking up that mortgage crisis business—but why should we care if a posse of banks takes a bath on a bunch of bad loans? That's the business they're in. If they don't want it to happen again, they should buy some risk assessment software.

In the meantime, we should focus on what we can actually accomplish and not get carried away by markets we can't control or caught up in trying to outrun economic trends shaped by supranational financial institutions.

Posted Jan. 23, 2008 9:31 AM EST

Ryan Naraine: Security Watch

REALPLAYER SLAPPED WITH 'BADWARE' LABEL

THE GOOGLE-BACKED STOPBAD-ware.org project has slapped a "badware" label on the widely deployed RealNetworks RealPlayer media player for problems associated with disclosure and uninstallation.

For the most part, the nonprofit group has reserved the badware label for sketchy spyware-related products, but, in a new report, StopBadware.org singled out RealNetworks for failing to disclose that RealPlayer 10.5's Message Center will display pop-up advertising and for a problem with files that remain after RealPlayer 11 is uninstalled.

"We find that RealPlayer 10.5 is badware because it fails to accurately and completely disclose the fact that it installs advertising software on the user's computer," the report said. "We additionally find that RealPlayer 11 is badware because it does not disclose the fact that it installs Rhapsody Player Engine software and fails to remove this software when RealPlayer is uninstalled.

"We currently recommend that users do not install the versions of RealPlayer software that we tested, unless the user is comfortable with the software behaviors we identify or until the application is updated to be consistent with the recommendations contained in this report," the report continued.

RealPlayer 11 is currently promoted by RealNetworks at www.real.com. RealPlayer 10.5 is distributed through channels such as Mozilla Firefox's Missing Plug-in feature and the BBC Radio Web site.

The specific problem with RealPlayer 10.5 centers on the software's Message Center feature, used by RealNetworks to advertise the media player's offerings and to provide notification for things such as security updates.

"The advertising software bundled with Real-Player is misleadingly called a 'message center,' and is described incompletely and inconspicuously in the EULA [end-user license agreement] as software designed to provide useful software updates," the report said. "When RealPlayer 10.5 is installed, the advertising features of this 'message center' are enabled by default for users who choose not to register their personal information with RealNetworks after the software is installed."

StopBadware.org—funded by Google, Sun Microsystems and Lenovo and managed by Harvard Law School's Berkman Center for Internet & Society and Oxford University's Oxford Internet Institute—also found badware-related problems with the newest RealPlayer, Version 11.

"RealPlayer 11 does not disclose that it installs Rhapsody Player Engine, and does not remove this software when RealPlayer is uninstalled," the report said. "Users are not informed by the installer or uninstaller of the connection between RealNetworks and Rhapsody Player Engine."

I had a chat with RealNetworks spokesperson Ryan Luckin Jan. 31 about the StopBadware.org report, and, while the company disagrees with some of the conclusions, Luckin said changes will be made to future versions of the software.

RealNetworks no longer distributes RealPlayer 10.5 (although it is still supported) and has already changed the installation default check boxes that previously installed the Message Center by default.

In RealPlayer 11, an ActiveX control is used to install the Rhapsody Player Engine; Luckin acknowledged weaknesses in the uninstallation process. "That was a misstep on our part and something we'll change in a future update," he said.

Posted Jan. 31, 2008 4:37 PM EST

BLOG WATCH FROM PAGE 46

Deb Perelman: Careers

CARR (AGAIN) PREDICTS IT's DEMISE

IN 2004, NICHOLAS CARR CREated a few waves—not to mention drew the ire of IT professionals and struck fear into the hearts of CEOs and CFOs—when he wrote the book "Does IT Matter?"

In the book, Carr reasoned that IT had become a commodity, offering companies little strategic advantage because as soon as one company adopts a new technology, its competitors do the same.

In 2008, Carr is back again with his new book, "The Big Switch: Rewiring the World, from Edison to Google." This time around, Carr predicts the demise of corporate IT departments, to be replaced by utility computing.

"In the long run, the IT department is unlikely to survive, at least in its familiar form," Carr writes. "It will have little left to do once the bulk of business computing shifts out of private data centers and into 'the cloud.'"

Because individual employees will be able to engage in the processing of information directly, they won't need a legion of technical specialists to help them along—and this will impact businesses tremendously.

But what about the IT worker? Carr seems to recommend a move into information management and strategy.

"Over the next five or 10 years, the technical aspect of the IT department will become less important," Carr told eWEEK sister publication CIO Insight. "It will slowly evaporate as more of those experts go outside onto the grid. But the information management and information strategy elements will become, if anything, more important. The ways companies take advantage of digitized information will become more important, not less."

Posted Jan. 30, 2008 5:43 PM EST

Jonathan Ness

Security guard

Behind the scenes at Microsoft's Secure Windows Initiative

MICROSOFT'S SECURE WINDOWS INI-tiative unit has emerged from the shadows, promising a new level of transparency, as well as details of software vulnerabilities and security bulletins.

SWI, tasked with maintaining and managing all aspects of Microsoft's mandatory SDL (Security Development Lifecycle), has launched a new blog that provides customers with technical details on security vulner-abilities, mitigations and workarounds.

eWEEK Security Watch Editor Ryan Naraine recently spoke with Jonathan Ness, the lead software security engineer on the SWI Defense team, about how software vulnerabilities are rated, what goes on behind the scenes after a security vulnerability is reported, and the ups and downs of working with third-party researchers.

idays in 2002, I read the second edition of [Microsoft Senior Security Program Manager] Michael Howard's "Writing Secure Code" from cover to cover.

I was working in the military at the time, and, after going line by line over the 600 pages in the book, I decided on a whim to apply to Microsoft to work on [Howard's] team. I went through the interview loop, and here I am on the SWI team, working at Microsoft

> ## 'If we think something we put on the blog could actually help an attacker, [we won't release] the information.'

What's your background? How did you end up at Microsoft?
During the Christmas hol-

because of that book.

What's your role within SWI?

I work on one of the peer teams—SWI Defense—that focus specifically on creating mitigations and workarounds for vulnerabilities.

We work directly with the MSRC [Microsoft Security Response Center] and the product teams to reproduce vulnerabilities, create and test temporary workarounds, and help with rating the severity of a security issue.

We always want to

make sure we're offering the right guidance for customers, whether it's a workaround before a patch is released or product-specific mitigations in the bulletins.

There are other teams within SWI that we work alongside. SWI React, for example, is a peer team that's responsible for finding vulnerabilities that may be related to an externally reported issue. They build

fuzzers [vulnerability-testing tools] to look for specific issues and handle the code review to make sure we're not missing anything. They handle things like testing the patch, validating some of the work from the product teams.

What happens when a vulnerability is reported by a third-party, or external, security researcher?

When a bug report comes in, the MSRC guys will look it over and work on making sure we have all information to help us reproduce the issue. They will open a ticket, notify the researcher and pass it on to the SWI React team. If it's something the MSRC flags as critical, SWI React gets on the ball with the MSRC and the [affected] product team immediately.

The priority is to reproduce the vulnerability, look closely at the surrounding code and understand all potential risks. Once they figure that out, we come in to look for mitigations and workarounds to divert the flow of [attack] code—try to block the vulnerable code from being hit.

We'll go through the entire response process, which includes working with the product team to build a fuzzer and creating an attack tool to look for additional problems. We want to have a tool by the end of the servicing cycle that could have found [that vulnerability]

if it didn't come in from the outside.

There have been complaints from external researchers that Microsoft puts the onus on them to reproduce/prove the vulnerability.

We try to reproduce every vulnerability that comes in. We really do try. We try to gather all the information, whether it's just an e-mail notice or if there's a sample exploit. We will look at the code, build the test tools and try really hard to find what the [researcher] is reporting. If we can't, our only option is to go back

to them and ask them to help us reproduce it.

If possible, we'll try to set up a machine and ask them to hit us with an attack so we can try to capture it. Our priority is to reproduce it, figure out the problem, then get it fixed.

And once it gets reproduced?

My team's focus is to understand the vulnerability, find places where an exploit can hit the vulnerable code, then research for mitigations and workarounds to protect against the vulnerability.

In some cases, if it's an

issue that requires a [pre-patch] security advisory, we'll release the mitigations to help customers understand how they can protect themselves until we get an update ready. Then, when the bulletins go out on Patch Tuesday, you'll find our work in the mitigations section.

During the course of an investigation, we learn things that don't quite fit into the bulletins, so we decided to start a new blog to talk down to the guts of specific vulnerabilities. We're using the new blog [blogs.technet.com/swi] to get really technical about

> ## 'We try to reproduce every vulnerability that comes in. … We try to gather all the information.'

the vulnerabilities that we've fixed, how the mitigations work and some other workarounds that might not be 100 percent effective but still useful for some customers.

On the new blog, how do you balance the need to share technical information and the risk of giving too much guidance to malicious hackers?

We want to be sure people understand the vulnerabilities and all the mitigation guidance. Sure, hackers can use that same information to understand the bug, too, but you have to remember that we're only

dealing with things that are already patched.

We've talked internally about walking this fine line, and if we think something we put on the blog could actually help an attacker, we'll err on the side of not releasing the information. We're not going to post information that shows how to exploit a specific vulnerability.

We expect to have our blog entries coincide with [Microsoft's] Patch Tuesdays to go into more detail on the mitigation portion of the bulletins and help to clarify things that didn't make it into the bulletin.

The bad guys are already reversing our patches as soon as they're released. They have that research already. We subscribe to commercial exploit packs, so we know what's happening and the kind of third-party research that's being done after the patches are released.

There have been criticisms that Microsoft has been very slow to issue prepatch advisories and workarounds for things that are publicly known by hackers. Is that fair?

The advisories are still about giving customers proper guidance as soon as we have something that's tested and understood. Some things can be murky in the beginning when a vulnerability is complicated, and we're moving fast to reproduce

it and understand the risk. Some things come together quicker than others, and it can be tricky to figure out the right time to post an advisory.

Microsoft's own security guru, Michael Howard, has made the argument that buffer-related security vulnerabilities found in Windows Vista should be downgraded because of backup mitigations built into the operating system. Is that something the SWI team would consider?
Michael makes a good argument, but we don't feel good yet about reducing severity ratings for Vista.

This is how we look at it: If an exploit were to hit the vulnerable code, we'll assume that a hacker can bypass the mitigations. Sure, [Vista] might catch and terminate the process, but, in reality, it still hits the [vulnerable] code.

That's how we look

at it—if it hits the code, then we'll rate it accordingly.

Even with Protected Mode IE, there are certain ways to break out of that to launch an exploit. We have

> ## 'If an exploit were to hit the vulnerable code, we'll assume that a hacker can bypass the mitigations.'

to take that into consideration when we're rating bugs—same for the other mitigations. With ASLR [address space layout randomization], for example, if the exploit only works once in 256 tries, we'll still rate it as if it could be exploited.

There are times when we'll reduce the severity for things like Windows Server 2003; where scripting is disabled, we'll drop that down to moderate on server vulnerabilities. But if the affected code is

present and you can hit the vulnerable code with an exploit, we'll rate as if the exploit would have worked.

If it's a memory corruption vulnerability, we

assume the attacker can control the contents of memory, and we rate the bug accordingly.

When we apply a rating, we want to be sure people understand the details and the severity clearly so they can make a proper decision.

According to Microsoft's definitions, a flaw will be rated "critical" if it could be exploited to allow the propagation of an Internet worm without user action. But your IE bulletins are rated critical even if a user has to click on a Web site to be exploited.
We view clicking on a Web page as an expected user action. In fact, for those browse-and-you're-owned issues, we call those "zero-click vulnerabilities." We'll always consider those as critical, even though the word "wormable" doesn't really apply. *e*

SWI's new blog provides Microsoft customers with additional information on vulnerabilities.

eWEEK

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Surmounting Super setbacks

With Pats' loss fresh in his mind, Katt finds e-voting can be challenging

The Mortified Mouser was glad that the **Super Tuesday** presidential primaries came along last week to take his mind off the Patriots' **Super Bowl** debacle. On Sunday, the Katt couldn't help two burly Patriots linemen tackle one skinny Giants quarterback. But come Tuesday morning, Spencer could cast one vote for his favorite candidate.

But doing so presented the Geeky Gato with his first encounter with an **electronic voting machine**. It should have been a snap for the technologically intuitive Tabby, right? But the Wired One found himself stymied at the first hurdle—entering his voter account code. The screen displayed a keypad to let him enter the four-number code. It looked for all the world like a touch-screen. So the Katt found himself futilely pawing the screen wondering why nothing was happening.

It was only when the Impatient Puss took a deep breath and read the directions that he realized the machine used a wheel mouse to manipulate the keypad. It took a few more moments of trial and error before he successfully completed his ballot. "Geez, how do techno-phobes and total novices negotiate these boxes?" Spencer wondered.

Then Spencer found that even his tipsters were scratching their heads over the news coming out of Silicon Valley last week. One of the more puzzling moves was **Juniper's** decision to scrap the DX line of application delivery controllers. The product line, which Juniper acquired with **Redline Networks** at the same time that it made the rapid-fire buyout of **Peribit Networks**, cost Juniper $132 million. Three years later, and undoubtedly not even close to recouping that investment, Juniper decided to phase out the DX line. One insider theorized that perhaps sibling rivalry contributed to the downfall of the DX line, which was supposed to have been integrated with the

WX line. The company may have decided it didn't make sense to spend the money on the integration effort.

Then the KattPhone buzzed with a call from an **EqualLogic** VAR with a very sarcastic message about the fanfare **Dell** trumpeted around the first "new" products introduced since Dell completed the EqualLogic buy. Dell held a whole news event around the EqualLogic products, but the VAR acidly noted that Dell merely recycled the old products under new names. The announcement only served to raise channel partners' skepticism that Dell was going to steadily update the product line.

Other people are raising questions about those glowing estimates for the **virtualization market's** growth potential. People say there's lots of green field in the market, but that number seems to be keeping steady, with about 93 percent of potential buyers holding off on implementing technology. So what's holding back adoption if this stuff is so hot? **Dennis Hoffman**, an **EMC** exec who led the **RSA** acquisition, explained the situation to the Gastronomic Gossip over a repast of sea bass and frisée salad at a tony Madison Avenue eatery. Hoffman said a lack of confidence in the security of virtualized environments is why. He said to look for virtual security products from EMC-RSA to hit the market in the next few months. *e*
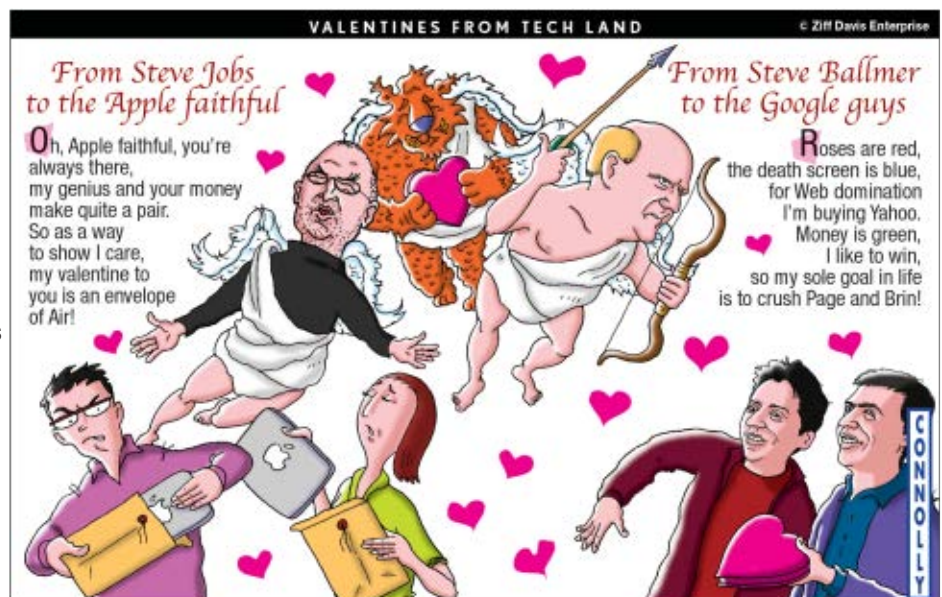
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