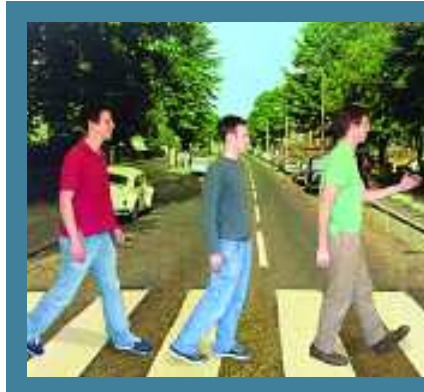


SD Times

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The Industry Newspaper for Software Development Managers



BEHIND THE CODING: THE MAKING OF A 'ROCK STAR' APPLICATION

page 5

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Borland Dumps Core SDP

Four-way product offerings replace single ALM platform

BY ALEX HANDY

Borland Software is abandoning Core SDP, formerly the centerpiece of its application life-cycle management approach to software development, according to officials at the company.

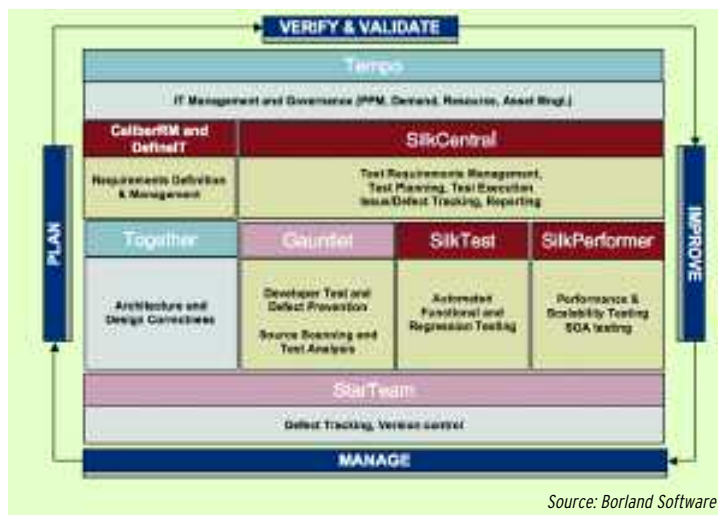
The role-based Core SDP, which had been released to much fanfare in March 2005, has been pushed aside by a new four-way solution, led by Borland's new Lifecycle Quality Management (LQM) suite.

Brad Johnson, Borland's director of product marketing, said that Core SDP would soon be phased out in favor of the four different life-cycle management solutions based on the company's

newest products. These pieces can be combined into a single ALM solution, and Johnson pointed out that the products that made up Core SDP are being portioned out into the appropriate new package.

Marc Brown, senior director of product marketing, said that Core SDP's roles-based tooling did not reflect the roles that existed within clients' companies. "Everyone defines those roles differently," said Brown. When asked if the Core SDP would be chopped up and rebranded under the four new ALM solution lines, Brown said, "Yes."

The decision to dump Core **continued on page 21 ▶**



Borland's LQM suite encompasses the testing and requirements tools needed to integrate testing and development teams under one communication and planning framework.

U.S. Names First Czar Of Cybersecurity

IT trade association executive Garcia fills long-vacant position

BY JENNIFER DEJONG

Filling a post that has been vacant for more than a year, the U.S. Department of Homeland Security has named Gregory Garcia to be the nation's first assistant secretary for cybersecurity and telecommunications.

DHS Secretary Michael Chertoff last month plucked Garcia from the Information Technology Association of America, a trade group where he has served as vice president for information security policy and programs since 2003. "Greg brings the right mix of experience in government and the private sector to continue to strengthen our robust partnerships that are essential to this field," Chertoff said in a statement.

Paul Kurtz, executive director for the advocacy group Cyber Security Industry Alliance and a critic of the way DHS has handled cybersecurity issues, praised the appointment. "Greg is an excellent choice for the position, bringing both his solid knowledge of information security issues and strong relationships in the private sector to [DHS]," he said in a statement.

Earlier this year, Kurtz, among others, criticized DHS for its failure to fill the assistant

continued on page 21 ▶

SPECIAL REPORT: ECLIPSE PROJECTS

Before the next release train is ready for consumption, a few tasty morsels will be ready to serve



page 25

W3C Giving Sites to the Blind

Working on accessibility standards for rich Internet apps

BY ALEX HANDY

The blind may soon be able to better access AJAX widgets in Web sites. The World Wide Web Consortium has published the beginnings of new accessibility standards aimed at rich Internet applications. The guidelines are a first step toward the establishment of best practices for making RIAs accessible to screen readers and alternate forms of computer interface navigation.

Judy Brewer, director of the Web accessibility initiative for

the W3C, said that the new guidelines and road map, which were released in late September, will expand significantly over time. "We're calling them the start of the WAI-ARIA Suite. That includes one document that's essentially a road map, and two documents that include work in specific areas," said Brewer. The latter of these two documents seeks to lay out how roles, states and properties should be defined in accessible rich Internet applications.

WAI-ARIA stands for the Web

Accessibility Initiative's Accessible Rich Internet Application suite. That suite, said Brewer, will comprise best practices documents that will give developers guidelines for making their RIAs amenable to use by the blind and physically handicapped.

Brewer said that the initial set of three documents—the road map, states and properties, and roles documents—are now open for review and comment. Later, the Web Accessibility Initiative will expand and refine these and other accessible RIA-

continued on page 17 ▶

A HUB OF AJAX ACTIVITY PAGE 6

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_INFRASTRUCTURE LOG

_DAY 15: This project is out of control. The development team's trying to write apps supporting a service oriented architecture...but it's taking FOREVER!

_DAY 16: Gil has resorted to giving the team coffee IVs. Now they're on java while using JAVA. Oh, the irony.

_DAY 18: I've found a better way: IBM Rational. It's a modular software development platform based on Eclipse that helps the team model, assemble, deploy and manage SOA projects. The whole process is simpler, faster and all our apps are flexible and reusable. :)

_The team says it's nice to taste coffee again, but drinking it is sooo inefficient!



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BEA Pulls a 360 With Consolidated SOA Offering

BY ALEX HANDY

BEA Systems used its annual conference to announce the circling of its product lines. The mid-September event was highlighted by the announcement of SOA 360 (as in 360 degrees), the company's new name for its integrated SOA platform. Comprising WebLogic, AquaLogic and Tuxedo, SOA 360 will offer a single management and development environment for service-oriented architectures.

Alfred Chuang, chairman and CEO of BEA, took the keynote stage of BEAWorld to discuss the potential of SOA in the enterprise. During his speech, he said that BEA now earns 20 percent of its revenue from AquaLogic sales, despite the product being just over a year old. "SOA puts business back in charge of business," said Chuang. He went on to



SOA 360 brings together the SOA, transaction and development solutions of BEA.

state that SOA allows difficult business processes to be better managed and executed upon.

The newly titled platform will materialize in 2007 with the first release of WorkSpace 360, an Eclipse-based collaborative development environment. SOA 360 will also include the existing BEA SOA products,

and incorporate some new bits of code that tie everything together under this Eclipse control panel.

Bill Roth, vice president of BEA's Workshop Group, said the WebLogic Workshop development environment will become a part of the WorkSpace 360 platform. Additional tooling will arrive in 2007, and will include a relationship layout tool, PHP development facilities and possible expanded support for REST. Roth demonstrated one of these tools, WebSpace Architect, which diagrams the XML associated with code held in the repository formerly known as Flashline.

Noel Yuhanna, senior analyst at Forrester Research, said that BEA's SOA 360 offers a broader perspective of SOA. "I think they are taking the right steps toward...getting this into

a real-world scenario."

But Mike Wienick, consultant and analyst for European firm Pierre Audion, said that he was still waiting to see just how much of SOA 360 is marketing hype, and how much is actual innovation. "Obviously the idea's very interesting, but to me it's not very different than what they've talked about before. It makes sense for customers who are using all three, but how much is it going to cost to upgrade?" wondered Wienick. He went on to say that BEA has been saying all along its products would be integrated and cohesive.

MORE WORLD NEWS

Also announced during BEAWorld was the release of the AquaLogic Data Services Platform 2.5. The software is designed to access and present any form of data available within an enterprise.

In addition, the company announced the formation of a partnership with Web services reseller StrikeIron. The partnership will bring new data integration services for harvesting information from Excel spreadsheets and making it available to an AquaLogic deployment through the data services platform.

BEA also used the conference to introduce its Guardian support service. This new tool offers real-time suggestions to administrators working with WebLogic or AquaLogic installations. Guardian, said Chuang, will keep users up to date with current patches and inform them when they are moving into areas that could cause problems down the line. The system can download and install updates specific to situations encountered during daily administration. No date for the delivery of Guardian was given. ■

Sumero-Akkadian Recognized Here

Unicode 5.0 adds scripts from ancient languages

BY P.J. CONNOLLY

Fifteen years after its first publication, the Unicode standard has reached a milestone with Unicode 5.0.0, the latest version of the character encoding scheme. The new version includes 1,369 new character assignments, with three new contemporary script families and two ancient: Balinese, N'Ko and Phags-Pa; Phoenician and Sumero-Akkadian Cuneiform, respectively.

The cuneiform characters represent the effort of a multidisciplinary team based out of Johns Hopkins University, known as the Digital Hammurabi project. Much of the project's efforts and its National Science Foundation grant were devoted to hardware solutions that addressed the problems of scanning three-dimensional clay tablets, and displaying them in a format that allows users to magnify, pan, rotate and tilt the images, and generate three-dimensional models as well as two-dimensional drawings that represent the precious originals.

But software concerns also played a part: The first cuneiform e-mail was sent in 2001, and in 2004, both the Unicode Consortium and the ISO 10646 WG2 working group approved

an encoding standard, which incorporated characters from Akkadian, Eblaite, Elamite, Hittite, Hurrian and Sumerian.

Unicode is important in the internationalization and localization of applications; ideally, translatable strings such as dialog boxes and menu items are separated off into resource files, while variable formatting and searching, sorting and other processing are designed to be language-independent. This internationalized application is then packaged with appropriate resource files, becoming localized versions that cost less to produce than those built by translating the entire application into other languages, one at a time.

Mark Davis, president of the Unicode Consortium, explained, "Companies tended to toss their products across the wall to some subsidiary in Japan or France or someplace, and that group would have to make sense of what all this code was." He observed that "you'd end up with something that was difficult to maintain because you had multiple versions of code floating around," with expensive barriers to doing business in foreign markets. Although the market for software in Phoenician or

Sumerian is virtually nil, the Unicode standard includes archaic scripts in support of academic and antiquarian research.

The bulk of the new characters are from the added scripts; the cuneiform entries alone account for 982 additions. A number of minor additions to Western and Asian character and symbol sets make up the rest of the changes to the character database.

The files that constitute the Unicode Character Database are already available online at the Unicode Consortium's Web site (www.unicode.org/versions/Unicode5.0.0). A hard copy edition, titled "The Unicode Standard, Version 5.0" (ISBN 0-321-48091-0), will be published by Addison-Wesley in the fourth quarter of this year; the text will be available online in the early part of 2007.

Changes in the book's physical format and paper stock will result in a lighter, easier-to-use publication. Nevertheless, there's actually more content than ever: The book will provide the



SD Times Photo illustration: Maria Leonardi

full text of the Unicode standard, including the complete Unicode Standard Annexes, for the first time.

Unicode 5.0 tightens the conformance requirements for bidirectional implementations, used in Semitic languages such as Arabic and Hebrew. A number of behavioral specifications and property values for character, word, line and sentence separation were tweaked for accuracy; case-folding stability is considered improved over Unicode 4.1, and support for pattern syntax characters and stable identifiers is now included. ■

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DTrace: Anatomy of A 'Rock Star' Application

The makers of the mega-hit dynamic tracing framework discuss changes in development

BY ALEX HANDY

Adam Leventhal, Mike Shapiro and Bryan Cantrill are rock stars at Sun Microsystems. The three have spent almost the entire new millennium working on DTrace, the ground-breaking dynamic tracing framework in Solaris 10 that has won a dedicated following and much praise in the industry and press.

DTrace gives developers a view from the top of an application to the bottom. Using either prewritten probes or those written in the tool's D language, DTrace follows a process or thread from its initiation to its termination. That gives developers a view into what resources are being used, where slowdowns occur, and where serious errors enter the data stream.

We sat down with staff engineer Leventhal, distinguished engineer Shapiro, and senior staff engineer Cantrill to discuss the genesis of the DTrace project, and to talk about how software has changed over the past 10 years. What follows is an excerpt of that discussion.

Adam Leventhal: DTrace...was designed to be able to answer arbitrary questions with concision. There are two aspects to the power of DTrace. One is the dynamic nature of it: being able to ask arbitrary questions from any place in the system, from the lowest levels like the I/O subsystems and scheduling, through the kernel and system calls, all the way up to areas of Java and userland and things like that— aspects of any piece of the system. The other is that you can gather arbitrary data that is not just a predetermined payload, but rather anything you can think of. It was designed for production systems, meaning that it needs to always be safe. There can never be some way you could instrument the system in a way that could crash it or cause data corruption. Which is very different than any other tracing framework that's been designed in the past, or any sort of analysis tool that was designed in the past.

Bryan Cantrill: The key observation that we had is the nature of software has changed. It used to be that you would generate a binary and ship it, and if there was a problem with the binary, you could just go back to development and fix it.

Mike Shapiro: Also that binary was your whole application. One binary, one

processor, one thread, and most likely written in one language. And probably only using the base system, so it might access three libraries.

Cantrill: It was entirely static. So it was in C, or C++ or Pascal or Fortran.

Leventhal: And the libraries were all from one vendor.

Cantrill: Life was simple. And the tools for understanding software reflected that simplicity. Then in the '90s, the promise of componentization that had been fringe became mainstream. And that happened, arguably first with Java, but really it was the advent of the Web, where you could suddenly start really realizing distributed computing goals. You had multiple applications now, or multiple processes that form a single application. So an application became not just a binary. But then you had a Web server and an app server and a database server, and now you don't have one language—you've got three or four or five. You've got these different environments, different protected domains, and the problem is that the problems in software didn't really show up in development. They started showing up increasingly in production.... And the existing tools were kind of barely keeping up in the simple world.

Shapiro: I think the other consequence of what Bryan is talking about that's important to also see is that it's not just the same people with different tools, but that the people roles and what the roles are have totally changed as well. A lot of the people you talk to probably...run the gamut from someone who might be writing one of those components to someone who might be more like an integrator. And so the componentization drives productivity because you can sort of have people who focus on assembly activities, or the business logic or the glue. And that changes roles as well, because it means that there's no notion of, "Well, if I have a problem, only the guy who wrote this had this great tool to figure out what was going on," because there's not just one guy anymore. There's this huge stack of stuff that was assembled, and you don't even have the source code for all of it, right? Even if you had the world's greatest source level debugger, it doesn't really apply to a lot of these new roles. And that's why the tools not only have to be different, but



Photo Courtesy of Sun Microsystems

The Fab Three: Adam Leventhal, Mike Shapiro and Bryan Cantrill came together over DTrace.

also have to look more at who is actually using these things.

Leventhal: We are taking a very different tack than previous tool makers. Previous tool makers have been focusing on developers in development, which puts very different constraints on the problem, and they've been focusing on one particular aspect of the system, like debugging Java, or debugging C or even analyzing kernel statistics. We were trying to make a tool that had a systemic scope, that would let you gather informa-

tion from all of these different sources.

Shapiro: The reason why the old tools were very much focused...around a language, is because they were written by the same people that wrote the compiler.

Cantrill: With a compiler, it's like, "This input needs to produce that output." And if it doesn't, it's busted, and if it does, it works...the development tools were aimed at understanding applications that were that simple. And the world is just a lot more complicated. ■

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Alliance Is a Hub of AJAX Activity

Organization puts effort into making tools work together smoothly

BY ALEX HANDY

The OpenAJAX Alliance is hoping a new hub will bring harmony to AJAX tooling. The Open-

AJAX Hub is a project aimed at removing some of the conflicts that exist between various AJAX tools. Some alliance members

spent the summer writing this hub, while others worked on white papers and a newly unveiled Web site for the group.

The alliance also took time in early October to elect a seven-member steering committee. This governing body will

control the direction of the alliance, and head up efforts to refine the OpenAJAX Hub.

Better steering is a good thing, said Gary Horen, program manager of BEA Systems' compiler team. He is BEA's current representative to the alliance, which counted more than 50 members as of mid-September. The organization began work in February, and after a second burst of participation in May, some members went to work chasing short-term goals.

Those goals, said Jon Ferraiolo, IBM employee and acting director of the alliance, were to establish standards, build a central site for information, and create paths to understanding for CIOs.

That last bit was accomplished through the publication of a 20-odd-page white paper at the organization's openajax.org Web site. That first goal of establishing standards, however, is taking more time and work than the others. Currently, the first stab at standardization comes in the form of a reference implementation known as the OpenAJAX Hub.

"The OpenAJAX Hub is this effort that's under way to allow multiple AJAX toolkits to work together on the same Web page," said Ferraiolo. The first-generation AJAX products assume full control of the browser runtime. Our goal with this technical work is to allow you to use multiple toolkits. That took a summer's worth of work."


COLLISION PREVENTION


Using multiple JavaScript tools at once requires a hierarchical framework in which they don't collide with one another.

Said Ferraiolo: "To minimize JavaScript collision, the hub has a registration facility such that each toolkit can register the additions it makes to the browser's standard runtime. The hub, when running in debug mode, will flag that."

The hub seeks to put into code some of the best practices that are being advocated by alliance members. In October, every member of the alliance, prior to the group's first elections, signed a contract to work toward and to support these best practices. ■

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A Global View of Software Development

Merger creates company focused on agile development of third-party products

BY DAVID RUBINSTEIN

Don't call it an outsourcer, because the company creates a tight partnership with the client. And certainly don't call it an offshoring company. It has development offices in the United States as well as in Eastern Europe and India.

Besides, according to Peter Harrison, CEO of the newly named GlobalLogic, "those are emotionally charged terms that mean different things to different people. We're global."

GlobalLogic is the company that resulted from the merger late last month of international software development company Induslogic and Bonus Technology, a 300-person outsourcing company based in New Jersey with a large operation in the Ukraine. Now headquartered in Tysons Corner, Va., GlobalLogic, which is privately held and backed by venture capital, employs 1,300 people worldwide, with development offices in the U.S., Kiev, New Delhi and Nagpur, India, according to Harrison. The company's core competency is in telecommunications, which also is the area of greatest expertise for Bonus.

"We make software that runs on SIM cards, cell towers, the operations behind the cell towers, billing centers, VoIP stacks [and] fraud detection," Harrison said. "Millions of people use the software we write, but our name isn't on it."

Harrison said the company's goal is to become "the Flextronics of the software industry." Flextronics is a roughly US\$15 billion electronics manufacturing services company behind much of the hardware in use in aerospace, automotive, medical and industrial operations. It recently sold its software development business to an affiliate of Kohlberg Kravis Roberts & Co., a private equity firm. Sequoia Capital, which holds a small stake in the software business, also is a key investor in GlobalLogic.

Harrison said that unlike true outsourcing engagements, GlobalLogic thinks of its projects as joint ventures. "We forge partnerships and structure them as virtual subsidiaries," he explained. For instance, unlike other outsourcing contracts, GlobalLogic will not take a per-

son off a team once that person has been assigned to a project. Also, everything about the project is placed into a knowledge base, so "people aren't waiting

with pregnant pauses due to the time differences."

With the merger and renaming, GlobalLogic also is rolling out a new platform, Velocity,

that supports the company's distributed agile product engineering method. Velocity, Harrison said, is "an amalgamation of open-source products for

such things as knowledge management, source code management, testing and deployment." It also has a dashboard for collaborative management of software assets and of the development process, he added.

"The reality is that people are getting more product to market faster," Harrison said. ■

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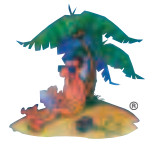
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Analyst: Support Lagging For Red Hat App Stack

BY ALEX HANDY

Red Hat now stands on top of JBoss, and is reaching further up into the stack. In mid-September, the company released the first version of its new integrated application stack, which includes the JBoss application server, JBoss Hibernate, Red Hat Linux and other pieces of the LAMP puzzle, including Apache, PHP and a choice of SQL databases. The stack includes support and service contracts that will give subscribers access to updates and technical support.

Yet the company still has to overcome issues around the quality of that technical support and others involving the merger of the QA and test teams resulting from Red Hat's April acquisition of JBoss.

Forrester Research analyst Michael Goulde said that Red Hat's technical support is usually good, but the company has yet to prove itself on the JBoss side. He added that not all of the customers he had spoken with were pleased with the quality of their technical support.

Goulde said that the move makes sense for Red Hat. "There's no one else who will [move up the stack] in a credible fashion," he said, noting that Novell's offering is not tied to an application

server. Currently, Novell offers strictly LAMP stacks with no application-specific tools, like Hibernate or JBoss. While Novell does offer its own application server, Extend, the company has not marketed a cohesive stack based around the Extend environment.

Todd Barr, director of enterprise marketing at Red Hat, said Red Hat still is integrating with various JBoss departments for better effect.

"One of the areas of integration from a Red Hat perspective—and we're only about 100 plus days into this—is the combination and standardization of our QA and test teams," said Barr. He went on to state that the JBoss support team is being remolded in the image of Red Hat's enterprise Linux support team. "We're applying those same principles to the JBoss product line. Ultimately, over time, this should raise the quality of all of our components."

The company has created rhstack.108.redhat.com, a news and information site designed for developers.

The stack costs US\$1,999 per server per year for up to two CPUs, and \$5,499 for four CPUs. Round-the-clock support and service costs \$8,499 per server. ■

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NEWS BRIEFS

COMPANIES

A new Web site has appeared inviting developers and software enthusiasts to post their beta code for others to see and use. Based in Tel Aviv, Israel, **Site On Spot** on Sept. 11 launched BetaMarker.com, a free community Web site at which users can judge which beta applications to download based on ratings of other users. According to the company, visitors to the site will know which software is best because poor software "will get voted against and buried."

RTOS developer Enea introduced **Optima**, an Eclipse-based development environment for its OSE real-time operating system. Working with Eclipse (3.1.2) and C/C++ Development Tools (CDT 3.1.1), the environment performs system-level browsing, debugging, profiling and analysis of large distributed systems across multiple processors and operating systems. Enea also is offering plug-ins for run-mode debugging, an OSE-specific object browser, and a pool profiler for system memory analysis . . . Also at ESC, Enea said it would begin shipping **Element 2.0** later this year, an update to its middleware for high-availability distributed systems. Version 2.0 will be compatible with systems running Monta Vista Carrier Grade Linux, Red Hat Enterprise Linux (RHEL) and Fedora Core, and CentOS (Community Enterprise Operating System), a free redistribution of Linux based on RHEL 2.1.

NEW PRODUCTS

Canoo has released the free and open-source **ULC XML**, an add-in to its Ultra-LightClient user interface software that gives Swing developers a rich Internet application option. ULC XML is similar to the open-source **canoo** SwiXML project, in that Java classes are mapped to element names and property names become attribute names. The hierarchies of the XML and the UI components mirror each other, allowing developers to quickly create user interfaces. It costs US\$1,499 per developer . . . At the Embedded Systems Conference in Boston in late September,

UPDATES

Troux has released version 6 of its **Metis** enterprise architecture solution with the ability to create data marts from which information can be extracted and reported for use in establishing strategic business plans. Metis Server, one of the core pieces, includes the enterprise asset metadata

continued on page 16 ►





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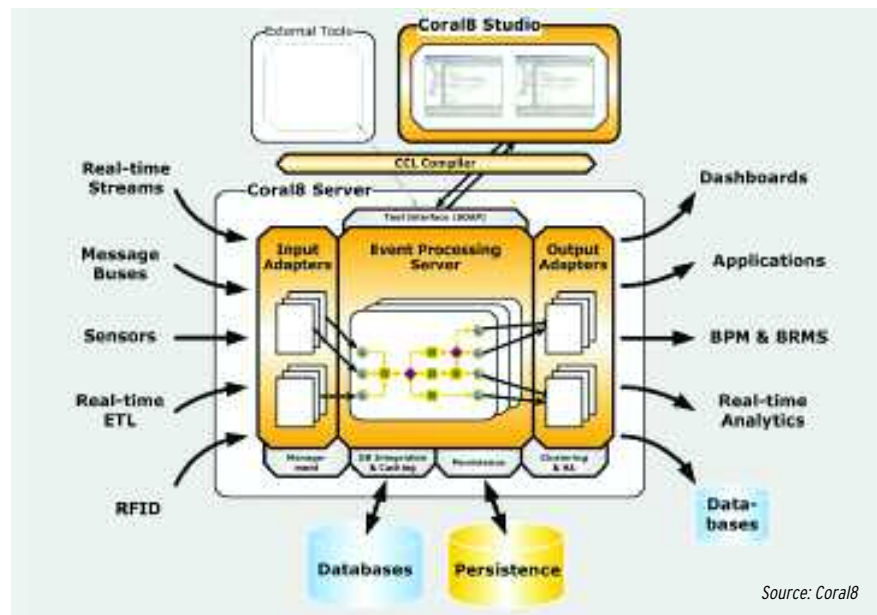


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Source: Coral8

Coral8's event processing server helps create business intelligence.

Coral8 Engine 4.4 Speaks Native XML

BY EDWARD J. CORREIA

The ability to connect with and consume native XML data streams and to process, publish and repurpose that data as rich content are among the new features in Coral8 Engine 4.4, released on Sept 18.

According to John Morrell, Coral8's product marketing director, its namesake complex event processing solution offers benefits over competitive XML processors that flatten XML structure. "If your XML stream is highly hierarchical, you'd have to rip [the stream] apart to process it, and that can drive latency up and reduce throughput," he said, adding that only then can processing begin. "To do complex event processing on top of [that flattened] XML would require a lot of extra code and time to process."

Since data sources such as those in SOAs and ESBs are streamed using XML, Morrell said, it made sense to modify the engine. "You can now just

take XML in your engine and process it natively, without having to shred or and transform it into another format. That saves you a lot of coding," he said, adding that, in most cases, the application winds up being a lot faster. The engine, available now, works with standards-based SOAs and ESBs.

A full-featured predeployment version is available for free at the company's Web site. Licensing starts at US\$20,000 for the professional edition and \$60,000 for the enterprise edition, which adds clustering, high availability, service guarantees and state persistence for disaster recovery.

Also new in Coral8 4.4 is the addition of variables to its SQL-like language. Morrell said that developers can now build an application that watches the 50-day moving average of a stock, he said, and when the figure reaches a certain point, "set a variable as the current stock price and pass it to another module. ■

Writing Apps That Fix Their Own Flaws

BY JENNIFER DEJONG

What if developers could write applications smart enough to diagnose themselves, and prescribe fixes accordingly?

That's what IBM researchers have in mind with The Build to Manage Toolkit for Problem Determination, expected to debut later this year on the company's emerging technology Web site, developerWorks.

The toolkit teaches a Java application to recognize common errors, encoding information on how to fix the problem, said IBM vice president of autonomic computing Ric Telford. It's a matter of telling the application: "If you see this, then do that." For instance, an error recorded in a DB2 log file could be a symptom that not enough JDBC con-

nections are open to the Web server, he said, offering an example. "The application can fix itself by changing the configuration settings in DB2."

The application essentially creates its own catalog of symptoms, and associated fixes, and carries that catalog with it from coding to testing and deployment, said Telford. The ability to do that eases support burdens for developers of commercial software. "They capture problems and fixes and ship that information with the product," he said.

The toolkit also can record bugs found during the testing phase, retaining that knowledge throughout the development cycle, said Telford. "Otherwise, the deployment team has to reinvent the wheel." ■

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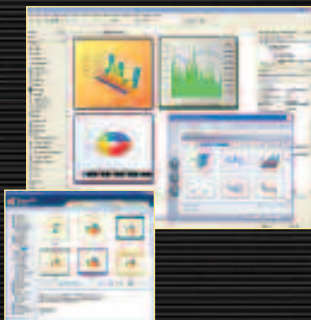


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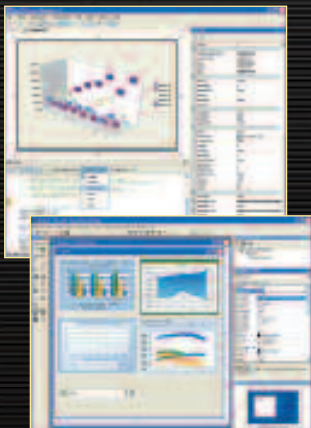


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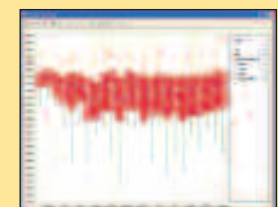


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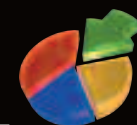
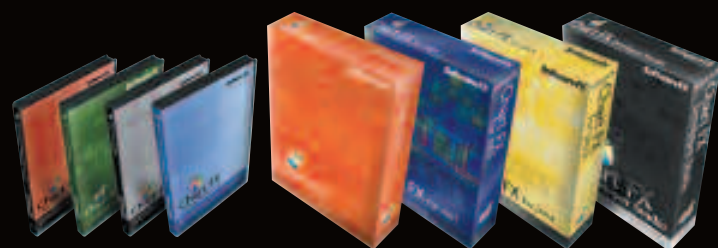


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Office Beta Refreshed, With New VS Tools

BY P.J. CONNOLLY

Sometimes, code names are better, or at least simpler. Take Cypress for example, which is a lot easier to type than the actual product name: Visual Studio 2005 Tools for

Office Second Edition. VSTO 2005 SE was released in beta last month and is expected to be ready around year's end and available at the same time as the 2007 Microsoft Office System.

A so-called "technical refresh" of Office Beta 2 also became available for download last month. Mostly consisting of bug fixes, the refresh also added some last-minute UI "fit-and-finish" changes, including a

Quick Customize Menu, and is optimized for testing with Windows Vista RC1, which was released at the beginning of last month.

The new add-in tools for Visual Studio add support for

PowerPoint and Visio, joining Excel, InfoPath, Outlook and Word. The feature Microsoft is touting the most is application-level add-in support, allowing the management, safe loading and unloading of managed add-ins.

According to product manager Mike Hernandez, VSTO 2005 SE "really supports the whole notion of Office as a development platform." He pointed to features built into VSTO 2005 SE Beta, including a programming model and runtime support for new Office features such as custom task panes, Outlook form regions and the Ribbon UI. Developers can now use VSTO 2005 SE's design-time features to build InfoPath 2007 forms from within Visual Studio.

GATEWAY TO VISUAL STUDIO

"We wanted to provide a tool set that was literally a gateway between Office developers and Visual Studio developers, so that Office developers would have a means of getting into a professional environment like Visual Studio," Hernandez observed.

For smaller projects, noted Hernandez, "VBA's a great tool. When you get into more enterprise line-of-business applications [with requirements for centralized support, centralized deployment, collaboration capabilities and security], "then you definitely want to go with VSTO."

At the time VSTO 2005 SE was announced in June, KD Hallman, Microsoft's general manager for the developer side of the project, admitted in a blog post that it wasn't going to provide exactly the same feature set as the VSTO 2005 tools for Office 2003. Certain Excel and Word project features are being hived off into the VSTO release planned to ship around Visual Studio Orcas. That VSTO release will also incorporate visual designers for custom task panes and the Ribbon UI.

Applications written with the original VSTO 2005 and Office 2003 in mind will run under the new versions of VSTO and Office. The VSTO beta is available for free to all users of Visual Studio Tools for Office 2005, or Visual Studio 2005 Professional Edition, and can be downloaded from Microsoft. ■



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Spying on Your Own Data With Altova

BY P.J. CONNOLLY

Last month, Altova released DatabaseSpy 2007, a new database design, management and query tool that the company claims can handle any ADO or ODBC database. DatabaseSpy plugs into a variety of database platforms; the first release works with the current crop of IBM DB2, Microsoft, MySQL, Oracle and Sybase products, and runs on the Windows NT family of operating systems.

Altova's previous products such as the MapForce Web services creation tool had touched databases, so this isn't new ground for the company. Tim Hale, Altova's marketing director, observed: "We already had some expertise in working with databases [from the existing tools], and we decided to leverage that to introduce this new tool."

DatabaseSpy 2007 includes a built-in SQL editor that provides auto-completion, color coding, drag-and-drop editing and syntax checking to assist users in getting SQL statements right the first time. Users can define collapsible sections of code for faster browsing and editing, according to Hale. The QuickConnect wizard allows users to select specific rows in a database table for inspection, or retrieve all rows; users can also simultaneously access multiple databases of different types with QuickConnect.

In addition, DatabaseSpy offers a visual database designer that lets users create databases from scratch or modify them as needed without hand-coding the SQL syntax. The design pane offers drag-and-drop construction from existing tables, and a preview function lets users see the effect of changes that the generated SQL statements would have, before committing them to the database.

A project manager in DatabaseSpy lets users organize frequently accessed connections, design files and SQL scripts into project files for faster reloading and reuse, Hale said. Another feature in DatabaseSpy allows users to access the many stand-alone databases that business software applications create and use without any thought given to management or access by other applications; this allows the maintenance and reuse of data

that would otherwise be difficult, if not impossible to recycle.

Applications that require data in XML format are often hindered by the inability of databases to present their con-

tents in the appropriate scheme. DatabaseSpy's content migration tools allow users to export databases to structured or flat XML files for stand-alone use, or directly into Alto-

va's XMLSpy product. CSV export and import are also possible, as is data export to HTML or Microsoft Excel files.

Altova's MapForce and the StyleVision report generator also

complement the feature set of DatabaseSpy. MapForce allows on-the-fly conversions from database, EDI, text and XML files, and provides for offline conversions as well, while StyleVision's drag-and-drop interface simplifies the task of designing output from XML documents and databases. ■



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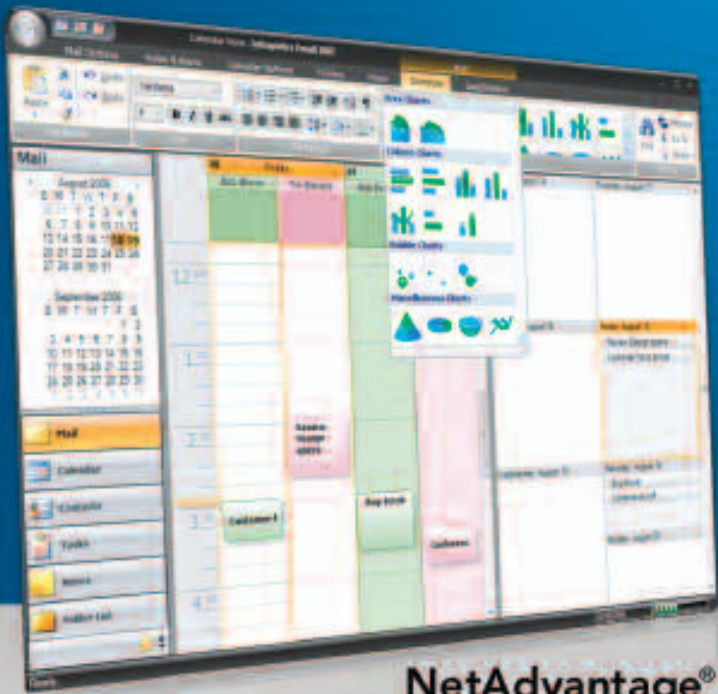
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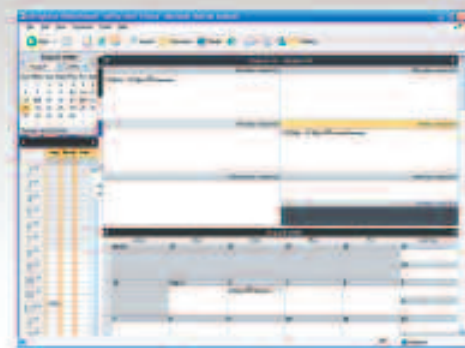
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Quest's Toad Now Can Take on Mainframes

BY P.J. CONNOLLY

Quest Software announced the release of Toad 2.0 for DB2, which now allows users to work with the same feature sets against DB2 for z/OS as they do against DB2 for Linux, Unix and Windows implementations—a first, the company claims.

The software now offers a streamlined installation with embedded DB2 client software and DB2 Personal Connect for connections to DB2 mainframe and AS/400 installations.

When Toad for DB2 first shipped last year, according to product manager Amit Argarwal, the company had to turn away many people because the original product didn't work with the mainframe DB2. Users can now “connect to the z/OS system, and do all the same types of things that they're used to doing” with other Toad releases, he said.

“Mainframe has traditionally been a very closed environment,” Argarwal continued, “where a lot of the development that goes on is done through green-screen-type, esoteric interfaces.” He went on to observe that Toad for

DB2 allowed people with skills on other database platforms to more easily apply their knowledge in an otherwise unfamiliar environment.

Toad for DB2 2.0 adds a so-called “Analyst Edition” that

gives users a master detail browser, pivot table analysis and report generation options, and which runs in a read-only mode. The Professional and Expert Editions continue from the first version; the latter adds

performance tuning to the Professional Edition's code completion, debugging, import and source control features. All three of these editions work with DB2 for z/OS.

For users interested in

advanced development and modeling, the Toad for DB2 Suite adds developer editions of Benchmark Factory for Databases, DataFactory and the Toad Data Modeler, but does not support DB2 for z/OS ■

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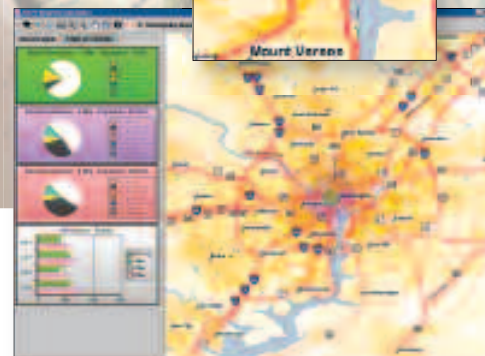
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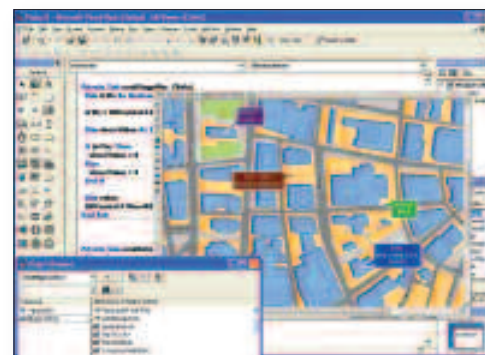
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Using GIS components within a commercial IDE

Oracle Gives 'Sleepycat' a Jolt

BY EDWARD J. CORREIA

Oracle in late September released Berkeley DB 4.5, which it claims is a faster, easier-to-use version of the popular application-specific database. It's the first Oracle-branded release of the software once known as Sleepycat.

Oracle has added a snapshot feature to version 4.5, which it says provides concurrency control for databases used in highly concurrent, mixed read/write systems. Also new is the ability to perform upgrades of replicated databases without stopping the system. Aiding this feature is a replication framework, including a set of predeveloped and supported functions for building high-availability or fault-tolerant systems.

As when owned by Sleepycat, Berkeley DB 4.5 is available under a dual license. The software and its source code may be used free of charge as long as the application build around it also is available as open source. Pricing for commercial licensing was not disclosed. ■

NEWS BRIEFS

MORE UPDATES

◀ continued from page 8

repository as well as portal, dashboard and reporting tools so organizations can get an aggregated view of their assets . . . Grid solutions provider Tangosol has released **Coherence Data Grid Solution Set**, a

TANGOSOL set of optional client configurations for enterprise-wide data grid access, access to real-time data feeds with on-client caching, and a compute client for configuring data- or transaction-intensive application servers. The solution is set to be generally available this month with **Coherence Data Grid 3.2**, an update to the grid server component that reportedly will include grouping and composite parallel aggregators and conditional data grid processors . . . GemStone Systems has updated its **GemFire Enterprise** data fabric for Java EE, grid, SOA and OLTP to version 5. New capabilities include role-based data distribution for setting priorities of cache members, data partitioning that now can be used to define logical namespaces that interoperate with partitioned and nonpartitioned regions, and a gateway/hub model for creating distributed systems across a WAN . . . On Sept 15, Microsoft released **Windows CE 6.0** to manufacturing. Beta 1 of the embedded operating system, code-named Yamazaki, was released in May with major improvements, including the ability to handle as many as 32,000 processes, each capable of addressing as much as 2GB of virtual memory. The previous capacity was 32 processes addressing 64MB each.

PEOPLE

Lindsey Vereen, editor of BZ Media's Software Test & Performance magazine, has announced his retirement at the end of October 2006. He will be succeeded by **Edward J. Correia**, currently executive editor of BZ Media's SD Times. ■

STPCon Makes Tracks on Testing

BY EDWARD J. CORREIA

Management, performance and security are among the new tracks at this year's Software Test & Performance Conference, coming to the Hyatt Regency Cambridge in Boston, Nov. 7-9. STPCon is produced by BZ Media, which publishes SD Times.

The conference also will host tracks featuring Rob Sabourin, a professor of software engineering at McGill University; and Rex Black, a



RBCS president Rex Black will speak on trends in software engineering.

veteran of the software and systems engineering industry and author of several books on software testing. Sabourin's sessions include just-in-time testing techniques and testing for agile development. Black will present a full-day tutorial on how to assess test team effectiveness. His 90-minute sessions include code coverage metrics and how to use them, and a two-part session on identifying and mitigating risks through testing.

Black, president of RBCS, a consultancy offering test automation and quality assurance services, also will deliver a keynote address titled "Five Trends in Software Engineering."

The 2006 conference marks the end of the tenure of conference chairman Lindsey Vereen, who is retiring from his role as editor of Software Test & Performance magazine.

"It's been a pleasure to serve as conference chair and gratifying to work with the dedicated men and women on

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Tuesday, 9:00 am-5:00 pm

CLASSES:
Wednesday, 8:30 am-4:15 pm
Thursday, 8:30 am-5:00 pm

EXHIBIT HOURS:
Wednesday, 2:30 pm-7:00 pm
Thursday, 12:00 pm-4:00 pm

KEYNOTES:
Wednesday, 4:30 pm-4:45 pm, Industry Keynote.
4:45 pm-5:30 pm, Rex Black Keynote.

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the front line of quality assurance," said Vereen, who has chaired the event since its inception. "They have a formidable responsibility, and I admire their commitment." ■

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W3C Works Toward Accessible RIAs

◀ continued from page 1
related documents.

"We're hoping that it would provide tools for Web developers," said Brewer. She added that current W3C guidelines have become popular with governments around the world as a way to standardize civic Web site design practices. Of previous accessibility standards released by the W3C, Brewer said, "We've already seen quite a bit of adoption of our guidelines at the U.S. government level and also in the EU."

Brewer added that many corporations are already implementing previous W3C standards, which suggest adding metadata tags to all images on a site that describe the purpose of that image.

Leif Ryge, a freelance Web developer based in the San Francisco Bay Area, said that while the W3C's best practices for Web design already go a long way to making sites accessible to screen readers, RIAs using AJAX and Flash programs were in need of some new best practices.

"If your site is already validated against the W3C's standards, you should be mostly accessible already," said Ryge. He added that scripted programs are not easily reconciled with the W3C's current Web Content Accessibility Guidelines. Brewer noted that version 2.0 of those guidelines would be surfacing early next year, and would seek to fix those issues.

TARGET ON TRIAL

But Ryge said some of his clients are now concerned by a currently pending accessibility lawsuit against Target.com, and as such, are being extra careful about ensuring that the blind can reach their content.

The lawsuit in question was brought against mega-retailer Target by the National Federation for the Blind. Initially, Target sought to have the case thrown out, arguing that interstate commerce could not be governed by federal or state laws. But the federal judge overseeing the case ruled in September that the case can proceed because the Target.com Web site can interact with the physical store locations, bringing the site under the jurisdiction of the Americans with Disabilities Act (ADA).

While the trial itself has not been completely resolved, Ryge said that some of his clients are nervous that they, too, will be open to lawsuits. He said that whether or not the U.S. govern-

ment mandates accessibility for Web sites—similar to when the ADA forced business owners to install wheelchair ramps and elevators—corporations may have to revise their sites to pro-

tect themselves from litigation.

But Brewer said that, mandated or not, making Web sites accessible to the blind and handicapped is the right thing to do. She said that the primary con-

cern of the W3C's RIA guidelines is to make the development of accessible Web applications easier on programmers. Said Brewer: "One thing we want to do right now is to make sure developers can do whatever they need to make Web applications and still have the [applications] be accessible." ■

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Studio Enterprise Adds AJAX Support

BY P.J. CONNOLLY

Last month, ComponentOne released the latest version of its application development tool set, Studio Enterprise 2006 version 3, which adds features designed to support

Microsoft's client- and server-based AJAX components, formerly code-named Atlas.

These include what the company claims is the first server-side AJAX control, WebSplitter and WebUpdate-

Splitter for ASP.NET, which works with any content or third-party component to automatically add AJAX abilities, and which supports flexible layouts with splits along horizontal or vertical axes, or

collapsible, resizable and scrollable panels.

Also in the release are five new data input controls, collectively referred to as WebInput for ASP.NET: WebCurrencyEdit, WebDateEdit, Web-

MaskEdit, WebNumericEdit and WebPercentEdit.

SuperToolTip for .NET helps developers add Vista-like elements, including labels and ToolTips to .NET applications. NavBar and TopicBar for .NET are two new components in Menus and Toolbars for .NET that allow the use of paneled, Outlook 2003-like navigation.

Three new chart types in Chart for .NET and WebChart for .NET enable the use of cone, cylindrical and pyramidal styles in WebForms and WinForms charts. WebChart for ASP.NET now offers AJAX features that eliminate form post-backs and increase the interactivity with end users.

The Menus and Toolbars for .NET and Preview for .NET modules now use the company's SmartDesigners technology for visual development, while the WebBars and WebMenus for ASP.NET components now offer optimized rendering; The company claims the HTML output from these controls has been reduced by 80 percent or more. ■

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Ivis Refreshes Process Software

BY P.J. CONNOLLY

Last week, Ivis Technologies released the latest version of xProcess, its Eclipse-based process management software for Linux, Mac OS X and Windows. xProcess 2.5 now offers what Chris Page, Ivis' director of technology services, noted as "full" financial reporting that adds consumables to dollar- and hour-based project accounting calculations, for a more accurate reckoning of the project life cycle.

Ivis added a workflow engine to xProcess, as well as process modeling for a visual representation of constraints and dependencies.

The new version also adds a fully functional Web version of the so-called Participant client, eliminating the additional software footprint on the desktop of what Page estimated was 80 percent or 90 percent of the xProcess user base. Ivis has also dipped its toe in the SaaS (software-as-a-service) pond, by offering xProcess On-Demand, for US\$59 a month. ■



Introducing Time-lapse View, a productivity feature of Perforce SCM.



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Borland's Core Dump, LQM Announcement

◀ continued from page 1

SDP comes less than a year after the company announced it would divest itself of its IDE business lines and focus on Core SDP. As SD Times went to press, sources indicated the sale of the IDE business was imminent, and could well have been announced by the cover date.

The four pieces of the company's new ALM software, said Johnson, are LQM, IT Management and Governance,

Requirements Definition and Management, and Change Management. The distinction between those products is necessarily blurry, said Johnson, because they're targeted at different customers and each is capable of

being integrated to extend the application life-cycle management inside of an organization.

"There is clearly overlap between defining and managing requirements and life-cycle quality management," said John-

son. "But very often the target consumer that we're going after in each of those domains is initially different."

The company announced its LQM solution in early October. This suite includes Segue's test

and quality assurance products, which Borland acquired in February; the company's Caliber-RM requirements management software; and the test automation tool Borland purchased in March when it acquired Gauntlet Systems. Also included in LQM is the StarTeam SCM repository. ■

BORLAND'S LQM SUITE INCLUDES:

SilkCentral:

Test management

CaliberRM:

Requirements management

Caliber DefiniT:

Requirements definition

SilkPerformer: Load and performance testing

SilkTest: Automated functional testing

Gauntlet: Automation and management of nightly tests

Garcia First In Cybersecurity


◀ continued from page 1

secretary for cybersecurity job. The position was created in July 2005 but remained vacant until Garcia's appointment. "Cybersecurity is [apparently] not an issue for DHS," Kurtz said in a phone interview with SD Times in late July.

Of Garcia's appointment, Kurtz said: "We look forward to working with him on defining priorities and programs to improve our readiness for a massive disruption involving the information infrastructure."

In addition to ensuring the security of information infrastructure, Garcia will oversee the Software Assurance Program, which publishes guidelines, sponsors events and works with the private sector to promote the development of secure software.

A spokesman for ITAA said Garcia was not available for comment. ITAA president and CEO Phil Bond applauded Garcia's appointment to the DHS post. "Greg has been a leading voice for improving the safety and security of America's information infrastructure. We wish Greg every success," he said in a statement. ■




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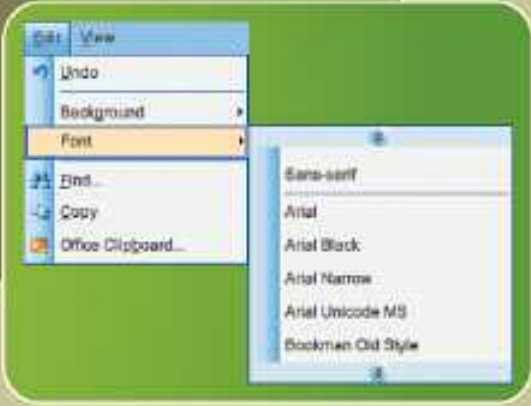
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WinForms
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<div id="RadMenu1" class="menu RadMenu_Default">
  <span id="RadMenu1StyleSheetHolder" style="display: none;"></span>
  <ul class="horizontal rootGroup">
    <li class="Item first"><a href="javascript:void(0)" id="RadMenu1_m0"
class="link">
      <span class="text">Root RadMenuItem</span></a></li>
    <div class="slide">
      <ul class="vertical group level1">
        <li class="Item first"><a href="javascript:void(0)" id="RadMenu1_m0_m0"
class="link">
          <span class="text">Child RadMenuItem</span></a></li>
        <li class="Item last"><a href="javascript:void(0)"
id="RadMenu1_m0_m1" class="link"><span class="text">Child
RadMenuItem</span></a></li>
      </ul>
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  </ul>
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A Countdown To Universal, Global Device Testing

TestQuest claims platform tests any mobile device anywhere in the world

BY EDWARD J. CORREIA

While it's not new to equip a specific device for testing over the Internet, TestQuest claims that its new Countdown platform can launch applications and run real tests on any device running any operating system anywhere in the world.

That claim, said company CEO Martin Hahn, applies even to proprietary operating systems and applications. "Let's say you're testing a Motorola phone," Hahn said. "That phone doesn't have to be physically connected to the test machine; the developer could be thousands of miles away." The developer sees a local representation of that device on a workstation. "When you press a button, you are really pressing the button on the physical phone thousands of miles away," he said.

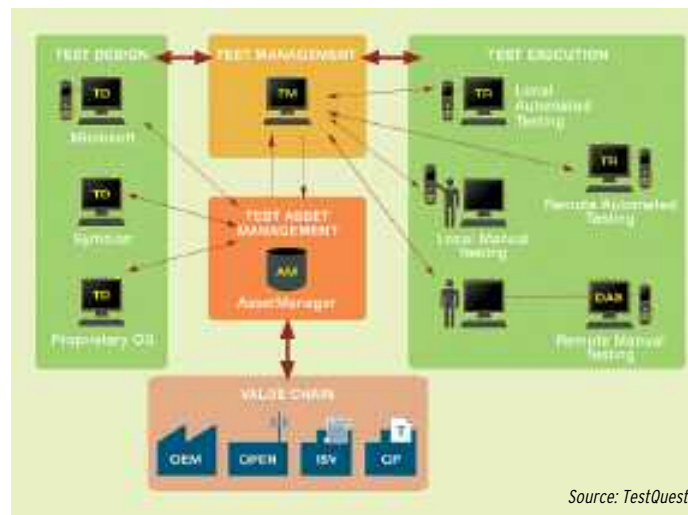
The results on the phone's screen are instantly displayed on the developer's screen in software, he said. "Rather than having to fly people back and

forth or shipping the device into India, you can set up the connection over the Internet and see what's happening from your office." General availability is set for Nov. 30; pricing starts at around US\$38,000 for a five-developer deployment.

The solution is built around device-specific agents that run on and control the target device, launch applications and test scripts and communicate results.

CountDown includes agents for devices from LG Electronics, Motorola, Nokia and Samsung running Linux (and other open-source operating systems), Symbian OS (S60 and UIQ) and Windows Mobile. An API allows connection to the Palm OS, but TestQuest is waiting until the Access Linux strategy matures. Supported networks include Cingular, Sprint, T-Mobile and Verizon. Organizations needing to support other devices or operating systems would build their own agents with a stand-alone development kit.

Developing agents for pro-



Source: TestQuest

CountDown uses on-device agents to launch tests and report results.

proprietary operating systems and applications can take anywhere from hours to weeks, said John Yuzdepski, the company's chief marketing officer. "The ability to have remote connectivity to a device in Korea to run on a Verizon network is a complexity unique to the mobile industry." Development time for custom agents, he said, depends largely on a developer's familiarity with the platform, "the testing protocols required, and whether you have access to the kernel development team."

Agents deliver test results simultaneously to a Web-based test management client and a SQL Server-based repository, which also stores test scripts, test requirements, information about the devices and dashboards. The management client handles test assets, delivers them to devices and schedules tests.

Test scripts are created with the stand-alone drag-and-drop environment written in .NET. The entire platform is extensible to enable customization and integration with an organization's existing test equipment and processes.

Out of the box, the solution is most valuable to development teams of device makers and carriers, which can use the repository to share and reuse test cases, logic and other assets. The added value to the enterprise, Yuzdepski said, is its ability to provide a testing solution for homegrown devices such as those used by FedEx and UPS, both of which are customers.

"They still have a requirement for functional testing," Yuzdepski said. "Their devices are not cell phones—they are specialized devices from Symbol and others—but they have all the issues." ■

Telelogic Rolls Out Rhapsody 7.0

Code generation, reuse enhanced

BY DAVID RUBINSTEIN

Enhanced reverse-engineering capabilities and an emphasis on component reuse highlight the Sept. 25 release of Rhapsody 7.0, the modeling tool for embedded systems and software acquired by Telelogic in March when it bought iLogix.

Telelogic wanted to make it easier for developers going from code to the model, according to George LeBlanc, senior director of marketing for Rhapsody.

A so-called code respect initiative maintains file structures, the ordering of elements in a file and naming when code is generated from a model, giving that code the same look as the original source code. Also, a new integration with the Eclipse CDT environment lets developers use the Eclipse-based IDE of their choice, from where code will be synced with Rhapsody models.

Rhapsody 7 also enables multilanguage design. "You can use C for firmware, C++ for the general application, and Java for the GUI piece, and all will be supported in the model at the same time," said Rick Boldt, senior director of Rhapsody marketing.

Rhapsody also now has the ability to do what Boldt described as a base-aware diff merge: When code branches or patches, the base model and the source trunk need to be brought together at the end of the day, facilitating parallel development. In the past, he said, Rhapsody could do only two-way merges. Boldt also noted Rhapsody now can do automatic merges, understanding when there is no conflict between branches and the base. Parameters for accepting automatic merges can be established by the developers.

A new Java API and command-line interface calls enable developers to build up a scripting environment to select assets and generate code, and pull related assets based on the variations and dependencies they have defined, he explained. A rules-based code generator lets developers modify asset rules and tailor those assets for different target platforms. ■

Jaluna Rebrands, Refocuses as VirtualLogix

VLX RTOS virtualization aimed at network gear, phones and set-top boxes

BY P.J. CONNOLLY

Virtualization is something that's easy to associate with mainframes, servers and even desktop machines. But real-time virtualization pioneer VirtualLogix decided that the recent Intel Developer Forum in San Francisco was a good opportunity to rebrand the company, unveil a new product, and announce a new focus on vertical markets.

Mark Milligan, VirtualLogix's vice president of marketing and business development, observed that the company's background gave it the confidence to attempt RTOS virtualization when many engineers dismissed the very idea: "What we've been able to do is take some of those

fundamental benefits of consolidation...and take that into the embedded market." Having found the most traction for the company's products in three areas, the company decided to take its technology, "turn it into vertical market solutions, and expand the road map."

The company, acquired as Chorus Systems by Sun Microsystems in 1997 and spun off in 2002 as Jaluna, now provides three virtualization platforms aimed at specific vertical specialties. All are built on what was Jaluna's OSWare, now known as VLX.

A new product, VLX for Network Infrastructure, allows multiple software platforms to be run on Intel Core Architec-

ture processors, such as the Core Duo E6400 and T7400, helping the migration from single-core proprietary designs to multicore devices. It will be available later this year.

VLX for Mobile Handsets 3.0, formerly OSWare for ARM, attempts to provide more flexibility for device makers and consumers by allowing devices to run a stable and secure real-time operating system in a partition alongside of a Linux instance. An independent executive allows operating-system monitoring, remote management and secure execution; VirtualLogix considers this the best way to maintain device uptime, guarantee service and

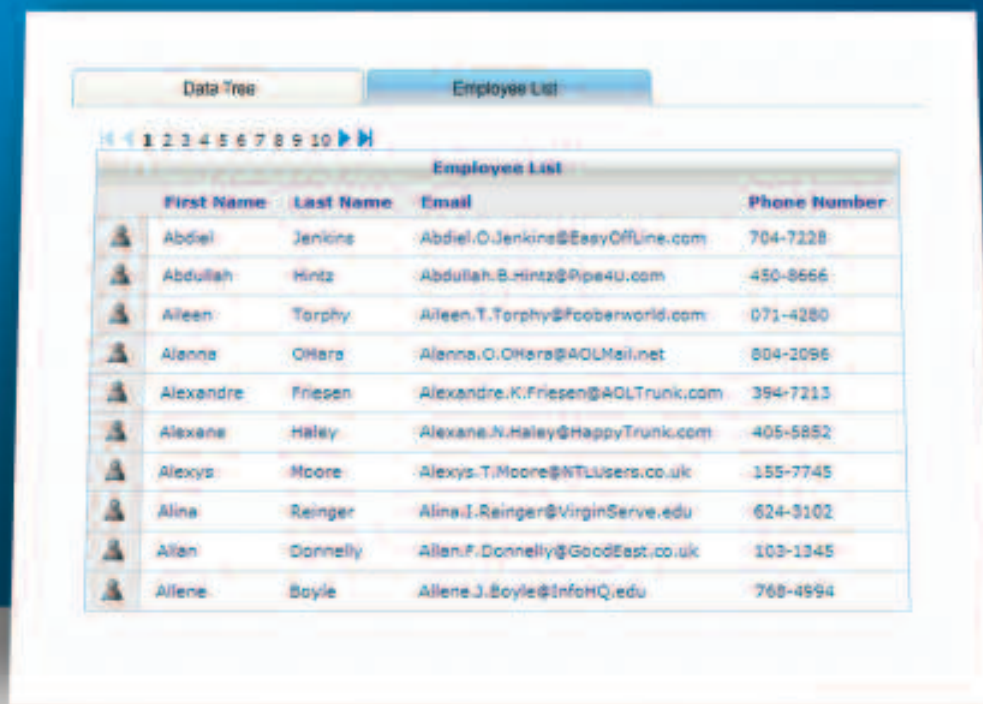
isolate open-source code from proprietary software.

Milligan noted that the mobile space offered some "really interesting opportunities" for VirtualLogix and its technology. The demand to add functionality and services created the smart phone, he said, which turns out to be bulky and power-hungry. Using virtualization "allows us to create a smart phone with what's known as a feature phone architecture." VLX for Mobile Handsets 3.0 is available now.

The third member of VirtualLogix's team, VLX for Digital Multimedia, is designed for low-cost telecom and video equipment using Texas Instruments' digital signal processors. ■

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— Patrick Higgins, Senior Software Test Engineer, SSAI

What's Cooking at Eclipse

Before the Europa release is fit for consumption, several tasty dishes will be golden brown and ready to serve

BY EDWARD J. CORREIA

It's official: The next Eclipse simultaneous release will be called Europa, continuing the Jovian moon pattern established with Callisto. But with Europa's launch date still more than half a year away, several important projects are expected to arrive hot from the oven before Europa hits the table in mid-2007.

Project: Mylar
Project Lead: Mik Kersten
Host Platforms: Linux, Mac OS X, Windows
Requirements: Eclipse 3.2, JDK 1.5 and Bugzilla, JIRA or Trac
Expected 1.0: Early December



Implementation:
Plug-in

Among the most far-reaching and broadly appealing of those soon-to-be-released Eclipse projects is Mylar, a plug-in that can increase developer productivity by managing and filtering tasks based on context.

"Developers waste a tremendous amount of time scrolling, navigating and parsing information instead of getting work done," said project lead Mik Kersten, a Ph.D. student at the University of British Columbia. The familiar Eclipse Package Explorer can contain tens of thousands of elements for even a small enterprise application, which he said results in information overload.

Mylar introduces context management and task management facilities to Eclipse, permitting tasks to be stored in a repository as objects. "When working with a fully integrated connector, you can rely purely on Mylar for working with that repository. Everything you can do in Bugzilla, you can now do in Eclipse," he said, for example. Mylar also will support Trac and JIRA issue trackers. "Rudimentary support for Google Code, SourceForge and gforce" repositories also will be delivered with 1.0, he said, including the ability to plan, save, query and edit tasks through the Eclipse embedded browser.

Adding a form of filtering to the Package Explorer, context management monitors a developer's interactions within Eclipse and automatically identifies information relevant to the task at hand, according to its documentation. Using that data—which can include a developer's access to methods, APIs, documents and other artifacts—the tool focuses Eclipse views and editors to show only relevant information. "The more you use Mylar, the more productive you become," Kersten said.

Mylar also contains a rich editor capable of drag-and-drop attachments and offline editing. Integrated change notifications allow developers to use Mylar's task list as an inbox instead of an e-mail client.

Mylar 1.0 is set to debut in early December.

Project: Eclipse Process Framework
Project Lead: Per Kroll
Host Platforms: Linux and Windows
Requirements: Eclipse 3.2
1.0 Release Date: Sept. 30



Implementation:
Full

The Eclipse Process Framework project's aim is to provide developers with a starting point for the creation of development best practices. Intended for all aspects of the job, the tool includes guidance for requirements authoring, maintenance and publication of methods and processes, and for library management.

The project's team, led by IBM's Per Kroll, at press time was finishing work on its two main components: EPF Composer and OpenUP. The tooling component, EPF Composer, lets developers pick and choose the process components from which to deploy and generate project maps. The tool can import and export XML to facilitate exchange of information with other environments. An API also permits extension to the environment. "You're not forced to use the tool we built; you can use it as an extensible framework to capture a process from scratch or import one."

EPF will include OpenUP, the Open Unified Process, which Kroll described as "a very light process that covers a complete life cycle of a project from start to end." It also gives developers the ability to "capture requirements, develop and manage code and manage all other aspects of a project." Also extensible, OpenUP is now at version 0.9.

Future editions will include Extreme Processing and Scrum. "All kinds of processes can be produced using EPF," he said. "We're working on an XP process; you should see that in the next couple of months."

Still, Kroll believes that OpenUP, which is intended for any organization developing software, can be useful as is. "Most will use it as a tool. But it has an API for the framework, and after a few projects some will modify it" to suit their own processes. He added, though, that the unmodified environment is not particularly well suited for large-scale development or for companies adhering to compliance issues. "We don't provide specific guidance for that, so a company would have to extend it themselves."

Eclipse Process Framework 1.0 was set for release on Sept. 30.

Project: DSDP, Target Management
Project Leads: Martin Oberhuber, David Dykstal
Host Platforms: Linux, Mac OS X, Windows
Requirements: Eclipse 3.2, CDT
Expected 1.0: Oct. 20



Implementation:
Plug-in

The Device Software Development Platform project, introduced early last year by embedded giant Wind River Systems, has gained tremendous interest and momentum. Three of its six subprojects—Target Management (TM), embedded RCP (eRCP) and Mobile Tools for Java (MTJ)—will release 1.0 versions this year. Device Debugging and Native App Builder are on the Europa timetable; Tools for Mobile Linux was still in the proposal stage at press time.

The TM project, which is led by Wind River's Martin Oberhuber and IBM's David Dykstal, gives Eclipse an interface for controlling remote devices and accessing its processes with remote shell. Developers can search for and edit files, and launch applications and test scripts. "It uses whatever services are registered with the framework [and is] optimized for as little data transfer as pos-

sible," said Oberhuber.

Version 1.0 also will include an early version of Service Discovery, which scans a network for devices and services offered. "We are already providing it with the download, but it's labeled as experimental," Oberhuber said, adding that the feature is expected to be considered stable by version 1.1.

Also left for version 1.1 will be the ability to store user actions for later execution. "If you found yourself doing the same things on a remote system like running a compiler, you can set a user action for that and also share it with others." A future edition might also include import and export capability, which would extend the copy/paste method in use now for uploading and downloading files. "Import will allow you to synchronize the local file system with a remote file system. But these plans are not signed off by everybody—it's still a proposal," he said.

Although the Target Management project includes a framework, Oberhuber said the tools would be useful to many people without modification. "They can use the tools out of the box on any Unix or Linux computer," he said. "But in the embedded space, you typically have proprietary protocols, so they would use the framework to [modify accordingly]."

Target Management 1.0 is set for release on Oct. 20.

Project: DSDP, embedded RCP
Project Leads: Chris Aniszczuk, Mark Rogalski
Host Platform: Windows
Targets: Windows Mobile 2003, 2005; Nokia S80
Requirements: Eclipse 3.2, RCP
Released 1.0: Sept. 22



Implementation:
Plug-in

For device-minded UI developers looking for an alternative to MIDP 2.0, the DSDP's embedded RCP might be worth a look.

On Sept. 22 the team, led by IBM's Chris Aniszczuk and Mark Rogalski, released a runtime framework for installing and managing Java plug-ins on devices, allowing them to share services and a common JVM. "This is a big improvement over MIDP 2.0," claimed Rogalski, "in which only applications in the same 'suite' can share common services."

With eRCP, Rogalski said the Eclipse and OSGi underpinnings provide the features of a plug-in architecture and a widget-based API. "Developers can now use their existing experience and knowledge of writing Eclipse plug-ins to write embedded [and] mobile applications. "This is the next step up from MIDP 2.0, which he said has had limited widget capabilities. The eRCP tools include a stable set of "rich widgets" for devices running Nokia's Series 80, Windows and Windows Mobile 2003 and 2005.

Support for Nokia's S60 and Trolltech's QT Embedded interfaces is planned for July 2007. ■

FROM THE EDITORS

Borland Moves Off Core

You had to figure Borland would do away with Core SDP, its software development optimization/application life-cycle management solution. That was developed under and touted by Dale Fuller, the former CEO who was banished last year after the company underperformed in the financial department.

The fact that it was associated with a difficult time in Borland's history (not that things are going so well now) probably wasn't reason enough to end Core SDP. The new management team has acknowledged the strategy did not match up with the roles people play in an organization to develop software. Core Analyst, Core Architect, Core Developer and Core Tester apparently didn't meet the needs of development shops—or didn't articulate buzzwords as clearly as the new package, which offers IT governance, life-cycle quality management, requirements definition and management, and software change management.

Of course, Borland is not the only company to put a shiny new wrapper on dog-eared products. IBM did the same thing when it took its Rational tools, combined them with the WebSphere app server, and launched the brand-new Rational Software Development Platform. That was delivered as a preemptive move against Microsoft's announced Team System, which would in fact have new (for Microsoft) functionality.

Borland's new packages include a lot of the old—the Caliber tools for requirements, StarTeam for change and configuration management, Together for modeling—and some of the new, including the Segue testing tools bought in February, the IT governance offering it acquired from Legadero in late 2005, and process improvement and skills training services acquired with consulting firm Terraquest.

And what of the developer tools? Our sources tell us that by the time you read this, the spinoff should be a done deal. But we're told JBuilder, the Java IDE, remains an important part of Borland's solution moving forward. Will Borland be able to retain the control it seeks to advance the product in a way that is strategic to the advancement of its overall offerings?

Borland is entering a crowded market, so it can't hurt to get ALM into its product names. Analysts with whom we've spoken believe Borland will get a small piece of the ALM market, getting customers to commit to its tools on a project level, but not across the enterprise.

The confused messaging, another reshuffling of products and abandonment of its IDEs makes it seem unlikely that Borland the ALM company will ever inspire the kind of loyal following it had when it was known simply as a maker of great tools for developers.

Understanding the Past

We haven't thought about the challenges of representing Sumerian on a computer since the last time we read Neal Stephenson's 1993 thriller "Snow Crash," but we applaud the Unicode Consortium's commitment to adding ancient scripts to its database. It has occurred to us, though, that as the technology advances and the surviving cuneiform tablets are translated, museums run the risk of finding that their precious collections consist of little more than TPS reports.

After all, we're certain there was a scribe in ancient Babylon who told his co-workers: "Human beings were not meant to sit in little cubicles staring at wet clay all day, poking it with sticks and listening to eight different bosses drone on about mission statements."

Joking aside, academic and cultural research will undoubtedly benefit from the ability to analyze ancient texts more fully. At a distance of 4,500 years, it's a miracle that any records of that time have survived, but Sumerian tablets have the benefit of being a stable format, contrasted with our so-called "permanent" records. We suspect that in 6506, archaeologists will know more about us from our non-biodegradable food wrappers and our toxic waste dumps than from our literature or laws. And those clay tablets will probably still be around, someplace, to be discovered again. ■

A Trip to the Moon

On this 21st anniversary of its inception, it would have been nice to wish "Happy Birthday" to the software test automation industry. But why should we offer felicitations to this misguided runaway monster that should have derailed a long time ago.

No one can take issue with the laudable objective of improving software quality, and it is the difficulties in achieving it that created the opportunity for technology-based solutions. However, if we remind ourselves of what we were trying to achieve, the catastrophic flaws in the solutions being offered become all too clear.

Many different approaches were taken to testing in 1985, the year that Auto Tester was founded, which I see as the first real attempt at test automation. However, it's long been accepted that it was a good idea to let someone other than the developers try a new application before it went live. Typically this was achieved by taking knowledgeable users—what are now described as Subject Matter Experts (SMEs)—out of the line of business while they performed an acceptance test.

Let us remember that this was before Y2K, an event that fundamentally altered users' expectations of the quality of applications that should be initially delivered by the development teams. Prior to Y2K, the proposition to the users was that if you give us your time to undertake a User Acceptance Test (UAT) then you will receive a new, or much enhanced, application. Y2K changed all this, as typically the new version offered not one iota of new functionality—just a promise that it would continue to work once everyone had recovered from the Millennium celebrations. The reaction of many user teams was to insist that the IS function took much greater, or even total, responsibility, as the business functionality remained the same and the testing did not require their expertise.

This enhanced level of expectation for the quality of application entering UAT was accompanied by a Y2K-driven realization in development teams that effective testing was tough to achieve, repetitive and, if undertaken manually, extremely laborious. And it is the issue of repetition that is at the heart of the drive for test automation.

It is in the interests of everyone involved in the application life cycle to see the number of test repetitions kept to an effective minimum as excess repetitions lead to a loss of motivation, a loss of confidence in the new application, missed implementation time

scales and, most important, a danger that application quality will actually reduce!

A loss of motivation and confidence is easily understood if the application is constantly bouncing between the UAT group and development because too many bugs exist that should have been identified and corrected during unit

and system testing. Test repetitions, whether manual or automated, take time, so the effect on timescales is inevitable. It is also a fact that UAT happens at the end of the development life cycle when previous phases will have probably overrun and an implementation date

been set. However, my personal favorite is the way in which excess repetitions can lead to a reduction in application quality. It is all down to boredom.

Consider the keen sense of anticipation, even excitement, in SMEs that accompanies the chance to see and test a new application. This application can potentially solve a number of issues in the line of business, perhaps increasing the company's competitiveness and financial success. This initial enthusiasm takes a bit of a knock as the tester experiences a crash on the log-in dialog, and it is distinctly on the wane as each test cycle follows another.

Testers are only human, and as the implementation date approaches, the excess repetitions have taken a potentially fatal toll. Driven by time pressures and an ever-increasing level of disenchantment, they inevitably start to test only the fixes development has provided. So the depth and effectiveness of testing actually deteriorates in this final stage, and that is when the dreaded collateral damage occurs. This need for testing to be equally effective and complete on every repetition is another key driver for test automation.

So if the justifications for test automation are eminently sensible, why have so many companies given up, not bothered or are incurring such significant costs in its support? This is a riddle that is easily solved simply by examining what the users actually wanted in the key areas of usability, capability and survivability—if you want to go to the moon, it's a good idea to build a rocket!

ROCKET SCIENCE

The multistage Saturn V rockets that supported the lunar missions seem the most appropriate analogy, so let's start with the first stage, the big one at the bottom. For us, the first challenge is usability, because unless the solution can be utilized by its intended SME

Colin Armitage



audience, it will never leave the launch pad. Even at this most basic level, the flaws in the available technology become apparent. Instead of empowering the SMEs, the programming constructs underpinning automated solutions have taken automation away from its target audience and instead created a new industry and a lucrative career path for people with the appropriate technical skills.

As our second stage, we have the thorny issue of capability. Who said test automation starts with the visual layer? Just because I press the submit button in my Web application, and I receive a message stating that my order has been accepted, is that sufficient confirmation that all is OK? What about checking the database? What about checking it every time rather than through some partial and infrequent SQL? This merely lifts the lid on a vast area of capabilities that are critical to effective testing, including items such as test data creation, protection and obfuscation.

You can throw money at the first-stage problem, and you can accept the limitations of your second-stage testing, but it is the third stage that has proved decisive and has consigned so much software to the shelf. Change is a fact of business and IS life, and unless a test automation solution can adapt to new versions of software, the benefits disappear. Creating automated tests will always take more time than a single manual test cycle—the benefits of automation are only realized through reuse. Take this away, and the corporate asset you were hoping to create becomes an expensive liability.

So go on, take a look out of the window. If you are aiming for the moon, what are you driving? ■

Colin Armitage is CEO of test software company Original Software.



THE VENTURE CAPITALISTS just can't keep that dough in their pockets right now. With analysts placing the value of Youtube.com at around a billion dollars and Yahoo considering a buyout of Facebook.com for a similar sum, it's clear that the bubble is back. This time, the bubble is riding atop the soapy suds of AJAX. Here in the Silicon Valley, investment capital is finding its way into the hands of new companies that seek to follow the new open-source model: Give the product away for free; sell the support and service contracts. But many of these companies are finding that writing good software and offering good technical support are two completely different business goals. Right now, not many start-ups are able to offer the level of service that is required to keep their clients satisfied. For their part, at least for now, the VCs don't seem to notice—or care. But as the open-source market expands, it is service and support failings that will pop many of these bubbles.

—Alex Handy

LEARNING THAT BERLIN, Elton John and Joan Jett were going to be on the entertainment list for next week's Oracle OpenWorld proves that coming up with after-show entertainment can't be easy. Finding something new and different becomes a challenge, and it's all too easy to hire a "hot" band such as AC/DShe, which seems to have made a small career out of playing San Francisco trade shows. But with last year's bands including Counting Crows and a Sting/Police cover group, it occurs that OpenWorld's organizers are going



backward in time. In a couple of years, can attendees look forward to used-to-be-big names such as ? and the Myste-rians or perhaps The Monkees?

—P.J. Connolly

SD TIMES HAS come a long way since its humble beginnings in February 2000, going from the 28th in our sector (dead last), to No. 2 today. And I'm proud to say that I've been there from the beginning, alternately donning hats for writing and editing. So it is bitter-sweet that I say so long, but not good-bye. After this issue, I begin my new role as editor of Software Test & Performance magazine, another BZ Media publication. I will miss writing for SD Times, but will still have the pleasure of sharing the company of its outstanding staff.

—Edward J. Correia

THE PASSWORD is...*disruption*. It's a term I've heard spoken with pride by software sellers. Most recently it came from VA Software's Darryll Dewan, who runs the SourceForge Enterprise business. The company has made available its SourceForge Enterprise Edition free for up to 15 users, hoping that when those people try it, they will come back for more licenses, which wouldn't be free. "Look what Eclipse did to JBuilder. Look what JBoss did to the other Java app servers. Is it disruptive? You bet, and we're right in the middle of it." The market is coming around to SourceForge, Dewan said, explaining that people want a common platform, integrated with tools, with no heavy-handed process, and a collaborative development environment. It sounds to me like the market is coming around, all right...to Eclipse.

—David Rubinstein

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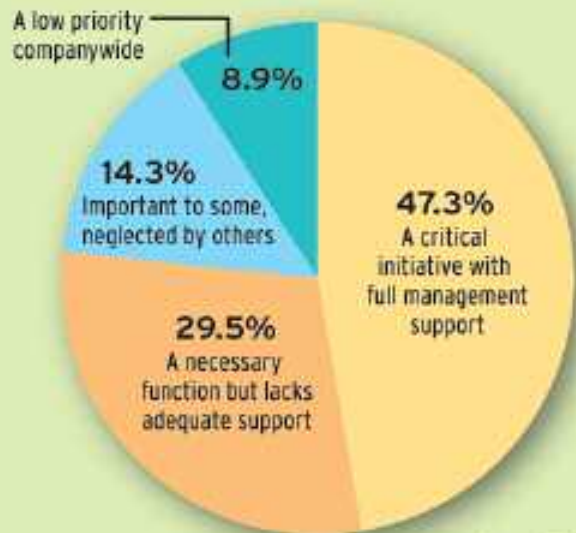
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How Would You Describe Your Company's Pursuit of Compliance?

Not especially committed, according to a recent survey conducted by the BPM Forum, the not-for-profit consortium focused on business process management.

Published in September, the "Compliance-Enabled Enterprise" study found that less than half of respondents consider compliance with regulations such as Sarbanes-Oxley to be a critical initiative with full management support. The study included responses from nearly 400 CEOs and other top executives.



Source: BPM Forum

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review



Test-First Tactic Trounces Thread Threat

Not long ago, I was contacted by a company whose very successful domain-specific engine is used by hundreds of businesses to make tens of millions of dollars' worth of transactions per year. Its Web tier used an open-source presentation framework, and its code had a liberal sprinkling of debug traces that outputted via another open-source logging solution. The company's Web, business and data tiers were coordinated by a commercial application server, and in the normal course of business did marvelously for all involved. But there was a problem.

"When our clients do an e-mail promotion, the system slows down tremendously. For some people, it might take a minute for a page to load; others might never see a page. What's going on?" The promotions use case involved a slightly different page-navigation scheme than normal, but the real problem was scaling: At 9:00 am on Monday mornings, the system would experience a higher number of concurrent users than the general use cases, when visitors arrived randomly. Because the system didn't completely fail, but limped along, I strongly suspected a problem involving the interactions between the business and database tiers: too many round trips, clumsy query construction, connections not being freed, and so forth.

My first step was to write some unit tests to automate the retrieval of the Web pages of the promotions use case. Once I had that in hand, I would move on to unit tests to really hammer the business logic and database tiers, where I was sure the problem lay. My first unit test retrieved the first page, checked the HTTP response code, and confirmed the number of lines in the returned Web page.

I decided to get the writing of the stress test out of the way. I wrapped calls to my first unit test in timing code, generated some threads, and sure enough, with MAX_USERS set to 2, things went fine. "Let me just hammer this first page in order to get a sense of the scaling curve," I thought. I didn't expect it to break, since the first page just set up the session and presented static components. So I wrote another test that called my timing test, doubling MAX_USERS every time. Four users went a little slower, eight a little slower still, 16 fell off a little more, and then...the system fell off a cliff. A few tests finished, but others timed out and threw exceptions. It was ugly.

I reran the tests, and this time the system showed the disastrous behavior in earlier runs, with only perhaps four or eight concurrent users. Sometimes even

just two concurrent users would cause the system to fail. If the app server was restarted, though, the ability to handle a moderate number of users would reset. Time to revisit my assumptions.

Confused, I set the logging level to DEBUG and fired up my test suite again. A strange thing happened: Although the response time degraded significantly (there were a lot of DEBUG traces), the system didn't "fall off a cliff." The DEBUG statements affected the failure mode of the system. I learned later this was one of the reasons the company had asked me to take a look—turning on DEBUG tracing had been the first step of their internal trouble-shooters and they had thereby lost their quarry before they ever entered the woods.

The DEBUG traces gave me the information I needed, and I was able to isolate the problem fairly quickly. Not as quickly as I might have, though: The problem occurred at a point in processing before any promotions-specific code was activated. It occurred, in fact, in boilerplate code involved with associating the HTTP request with a logical "Session" object. I had discovered (and quickly confirmed via a new unit test) that the vulnerability was not unique to

the promotions use case.

To cut to the chase: The version of the open-source presentation framework they used had a race condition. The association of an HTTP request with a logical session was not thread-safe: With concurrent calls, one thread might receive a null session and another might be assigned two (the second clobbering the first). This would cause an exception to be raised on the null-session thread, but the clobbered session would cause a long-lasting thread corruption in the application server. Every time the race condition occurred, it took out a thread from the application server, increasing the system's vulnerability to further failures. As the race condition clobbered more threads, though, the relative amount of time each remaining thread spent inside the critical section decreased! Eventually the system would degrade to one or two threads, providing the illusion that the system was "limping along." And making me ass-u-me that the problem had to do with the database.

Luckily, my bad assumption was trumped by my test-first approach. The solution was simple enough: Upgrade the presentation framework and, in the meantime, wrap the vulnerable section in three lines of thread-locking code. I would have made a lot more money rewriting their object-relational interface, but per line of code? I did just fine. ■

Larry O'Brien is a technology consultant, analyst and writer. Read his blog at www.knowing.net.

Windows & .NET Watch



Larry O'Brien

The Language of Lua

The past several months have seen a lot of ink spilled on the rise of dynamic languages. The reason for this resurgent interest in scripting, I believe, is the confluence of two factors: the speed of today's hardware and the recovery from what one pundit labeled the "Java nuclear winter." The latter refers to a phenomenon that has been consistently overlooked in the suddenly chic castigations of Java.

At the time Java was launched, it represented a very substantial step forward from the state of the art, C++. Java's promise of universal portability and its built-in garbage collection, immutable strings and lack of a preprocessor or conditional compilation were all very different ways of looking at the world that resonated deeply with developers. While these innovations came from other languages, Java was the first mainstream language to bring them all together.

I hasten to add that this was true innovation and Java was embraced by many developers the same way that Ruby is today—as a brilliant alternative to the bloated de facto language of the day. As some veteran readers will surely recall, there was considerable doubt as to whether Java would actually succeed in its core mission: less buggy code and

true portability. It was not until Sun worked out the last JVM kinks and Microsoft's attempt to extend the platform was finally smashed down that we all knew Java had turned the corner and would succeed in its ambitious mission.

That period—the mid-1990s—was a fertile time for the creation of dynamic languages. PHP (released in 1995), Ruby (1995), Lua (1993) and Python slightly earlier are all part of the same generation as Java. And in toto they were a statement about the need for a high-level alternative to C/C++ that would be less narrow than the "little languages" used in Unix (such as awk, sed and shell scripts) and not proprietary like the many 4GLs floating around at the time.

Now that Java has assumed the legacy role played by C++ in those days, developers are looking anew at the alternatives. And with the great advances in hardware diminishing the performance costs, some of those old languages have a new viability. Among the few that have not already been widely adopted, Ruby and Lua stand out. Ruby, as we have discussed earlier, is in the process of crossing the chasm.

Lua, however, remains a lesser-known alternative that has some very nifty features not commonly found elsewhere. The first is performance. In most independent benchmarks, it beats and sometimes routs all other dynamic languages. It is also lightweight. The entire distribution—compiler, runtime and libraries—fits in 1MB. Both aspects are intentional, as the primary application for Lua is as an embedded dynamic language in C/C++ applications. Today, C and C++ are used where performance is essential, and so an embedded language has to have similar benefits. As a result, Lua is very commonly embedded in games (World of Warcraft in particular) and occasionally in ISV offerings (such as Adobe LightRoom).

However, it functions just fine as a stand-alone language. Among its unique capabilities is that its fundamental object is a table (or what many people call hashes or maps). It uses a hash to implement object orientation—a capability made possible by implementing functions as first-class objects. That is, you can stuff a function into a hash slot

just as easily as you can stuff an integer. This mechanism is used for closures and for inheritance. Single and multiple inheritance are available by setting up the tables so that any missing functions are looked up in parent tables. Elegant, no? Lua leverages hashes in procedural contexts as well. For example, functions can return hashes, enabling them to return multiple values from a single call.

Of course, Lua has the usual dynamic features such as duck typing, garbage collection (with the capability of tagging elements for collection) and wide portability, as well as an open-source implementation. In addition, Lua benefits from a very active community that has created numerous libraries and development tools. Like Ruby before Rails, Lua is a gem waiting to be discovered—the difference is that it's much faster than Ruby, has a tiny runtime footprint and is easier to embed. For ISVs, in particular, it represents an important option.

I promise soon to move on from this topic of dynamic languages. I have one more to cover this year: Groovy, the about-to-be-released Java scripting language, which like Lua has numerous innovative features plus complete Java compatibility. Then, back to the larger travails we all face. ■

Andrew Binstock is the principal analyst at Pacific Data Works.

Integration Watch



Andrew Binstock

Mercury and Points Offshore

Looking for an independent voice on the HP-Mercury deal, I finally caught up with industry analyst Theresa Lanowitz, who has left Gartner and started up her own firm, Voke (like in pro-voke). She shares our concerns about the future of Mercury in a company that has not had success selling software in the past.

HP customers might think of the acquisition as giving them something more, but Mercury customers won't be interested in HP's network view of the world, or in OpenView, to which everything at HP slants, Lanowitz said.

Mercury's management team, led by Tony Zingale, was nimble and aggressive, helping the company to a 50 percent share of the software testing market. Its engineers, she said, have great visions for what Mercury's architecture needs to be for the future.

Now, it has become part of HP's staid approach, and the target of smaller, more nimble and aggressive companies. Empirix, another testing tools provider, is offering a free one-to-one switch from Mercury products to its own. Opportunities also exist for Compuware, IBM Rational and others, she said.

Lanowitz speculated that the US\$4.5 billion HP paid for Mercury was driven by bidding, mentioning such companies as Oracle, SAP and EMC as potential suitors. "HP isn't one I even would have guessed" to have an interest in Mercury, Lanowitz said.

She believes the traditional Mercury customer base will be looking to

evaluate products from other companies, since only a very small portion of HP's revenue comes from software. If you're a test tools customer, Lanowitz said, you'd have to be leery of a company "that gets 51 percent of its revenue from toner."

Shifting gears, Lanowitz said her company will be focusing on the applica-

Industry Watch



David Rubinstein

tion life cycle, with a mission to move the industry beyond the status quo. "Things are largely the same since 1999," she said. "IT is working on tactical things, and not being strategic. The IT model of today is really outmoded, and the application life cycle is one of those big areas."

According to Lanowitz, who worked for a software company before moving to the analysis side, "Companies will tell an analyst something they will never tell a vendor. It's like a doctor-patient relationship." She noted the disconnect between what the software sellers are saying and what the development teams are saying. "In the application life-cycle management environment, vendors think every IT organization is humming right along, efficient and effective. But these guys are struggling. It's a hard, hard life."

One area in which she sees a major change in how business is done is in the outsourcing of IT work. She described outsourcing as being in its third phase, with the first being cost-savings and the second involving figuring out how to make the outsourcing company an extension of the develop-

ment team. Phase 3 is around the offshoring of very technical skill sets.

"People with skills that good will work for a cool software company, like Adobe or Microsoft," she said. "The enterprise can't afford to keep those skills up to date." Citibank, she said as an example, doesn't need to pay someone \$100,000 to write LoadRunner scripts. "They need good managers, who can make the go or no-go decision on [deploying] applications."

Software companies also will have pressure put on them from enterprises to create tools that business analysts can use in collaboration with development teams, to ensure that what's being built meets the needs of the business. We're already seeing some of that in the requirements management space; she thinks this will become a big market opportunity in the coming years.

Further, the decisions on which tools the company should use will start to be made in conjunction with the outsourcing companies that will be using them. "While the payment is coming from a North American company, the use is by the offshore guys, and they'll help drive the evaluations."

With U.S. business schools overflowing and plenty of good seats still available at computer science schools, it will be easier for enterprises to find this type of manager, and send the coding overseas. It might not be as cost-effective as it was when the trend began, as programmers offshore get hip to what they can ask for, but it might be the only way for these enterprises to stay competitive in a world in which more and more business is moving to the Web. ■

David Rubinstein is editor-in-chief of SD Times.

BUSINESS BRIEFS

MOBILE 365 GIVES SYBASE GLOBAL, YEAR-ROUND UPTIME

Sybase has announced the acquisition of Mobile 365, in a bid to gain an instant lead in the realm of content delivery networks. The deal is valued at between US\$400 million and \$425 million. Mobile 365, based in Chantilly, Va., generated about \$90 million in revenue during its fiscal year ended March 31, 2006. Revenue is mainly from its mobile data, messaging and premium content operations for operators, content providers, media companies and financial institutions around the world. "This acquisition extends our Unwired Enterprise vision with the addition of two new enterprise channels—wireless carriers and content providers—making Sybase the leading mobile software and services provider in the world," said Sybase president and CEO John Chen in a statement. Among Mobile 365's data services are those for interoperability, interactivity and distribution of SMS, MMS, WAP and IM services. The company claims to process more than 3 billion messages per month over its operator-grade network, which contains connections to mobile operators, including Cingular, China Mobile, Telefonica, T-Mobile, Verizon Wireless and Vodafone—nearly 700 connections in all. The transaction is expected to close by the end of this year, and will create Sybase Mobile 365, a wholly owned subsidiary. Marty Beard, currently Sybase's senior vice president of corporate development and marketing, will run the subsidiary as its president.

RSA Security shareholders last month voted to approve the company's acquisition by **EMC Corp.** for US\$2.1 billion, adding security to EMC's portfolio. "Bringing RSA into the fold provides EMC with industry-leading identity and access management technologies and best-in-class encryption and key management software to help EMC deliver information lifecycle management securely," EMC CEO Joe Tucci said in a statement. RSA is expected to remain in its Bedford, Mass., headquarters and to operate as a division of EMC.

EARNINGS: Oracle posted record earnings and revenues in its first fiscal quarter, with GAAP net income of US\$670 million and GAAP revenues of \$3.6 billion. Those were increases of 29 percent and 40 percent, respectively. Much of the driver for Oracle's success was growth in revenues for new packaged applications, which reportedly climbed 80 percent. "We exceeded our guidance on every metric and delivered strong revenue growth across all product lines and geographies," said Oracle president Safra Catz in a statement. ■

EVENTS CALENDAR

STAR West Anaheim SOFTWARE QUALITY ENGINEERING www.sqe.com/starwest	Oct. 16-20
SoftSummit Santa Clara MACROVISION www.softsummit.com	Oct. 17-18
Development Products Conference San Jose EVANS DATA www.evansdata.com/dpc	Oct. 19-20
Oracle OpenWorld San Francisco ORACLE www.oracle.com/openworld	Oct. 22-26
OOPSLA Portland, Ore. ACM SIGPLAN www.oopsla.org/2006	Oct. 22-26
Trolltech Developer Days San Jose TROLLTECH www.trolltech.com/company/newsroom/events/all-events/devdays2006	Oct. 26-27
Colorado Software Summit Keystone, Colo. KOVSKY CONFERENCE PRODUCTIONS www.softwaresummit.com	Oct. 22-27
Zend/PHP Conference & Expo San Jose KB CONFERENCES zendcon06.kbconferences.com	Oct. 30-Nov. 2
ASP.NET Connections Las Vegas DEVCONNECTIONS www.devconnections.com	Nov. 6-9
Software Test & Performance Conference Boston BZ MEDIA www.stpcon.com	Nov. 7-9
Web 2.0 Conference San Francisco O'REILLY MEDIA www.web2con.com	Nov. 7-9
Six Sigma in Software & IT San Francisco WCB www.wcbf.com/quality/5068	Nov. 7-9
SuperComputing 2006 Tampa, Fla. IEEE COMPUTER SOCIETY sc06.supercomputing.org	Nov. 11-17
VSLive Dallas FAWCETTE TECHNICAL PUBLICATIONS www.ftponline.com/conferences/vslive/2006/dallas	Nov. 14-17
Application Integration and Web Services Summit Orlando, Fla. GARTNER www.gartner.com/2_events/conferences/apn17.jsp	Dec. 4-6
XML 2006 Boston IDEALLIANCE 2006.xmlconference.org	Dec. 5-7

For a more complete calendar of U.S. software development events, see www.bzmedia.com/calendar. Information is subject to change. Send news about upcoming events to events@bzmedia.com.

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