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THE MULTIVALUE TECHNOLOGY MAGAZINE | NOV/DEC 2009

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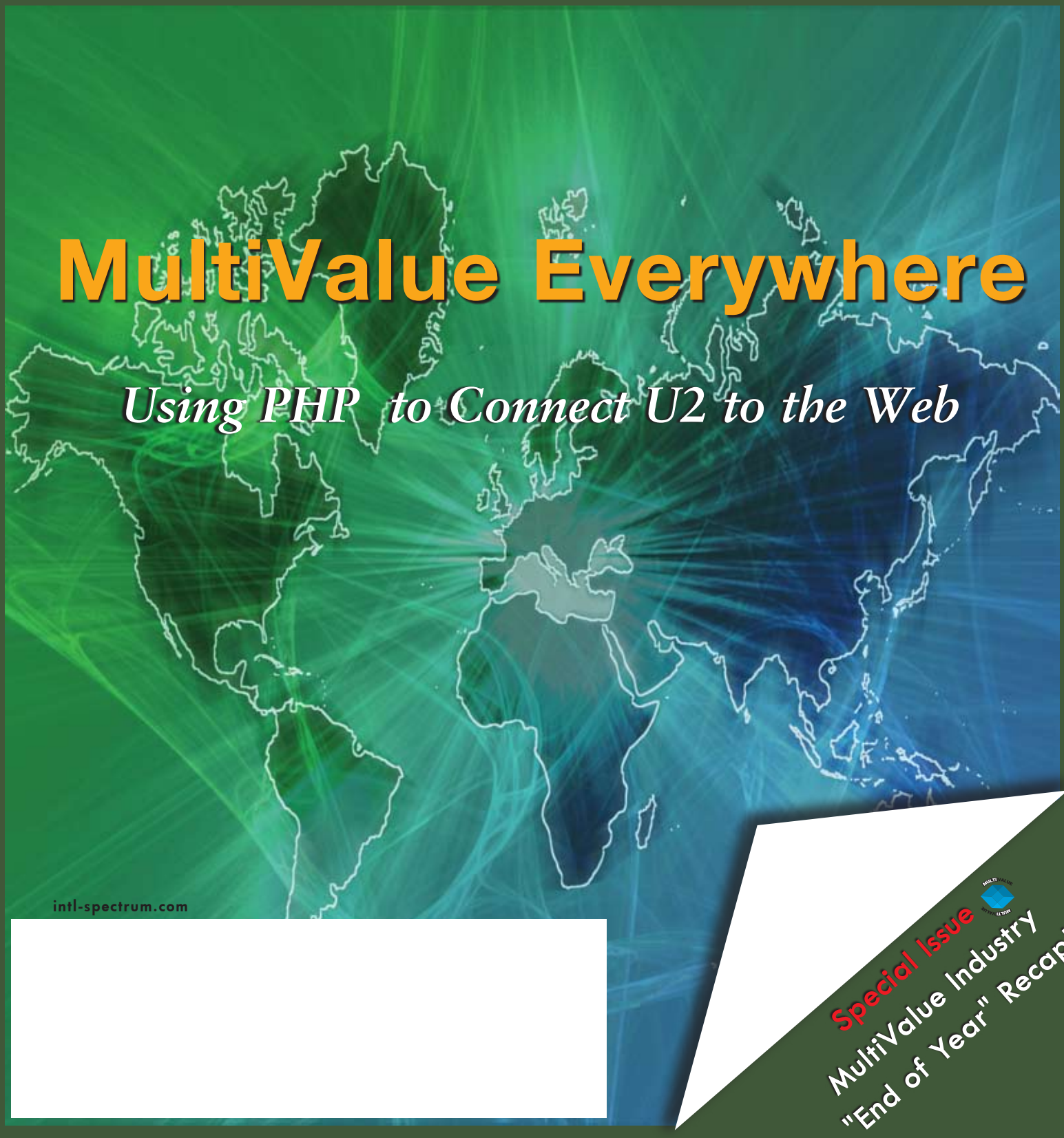

MultiValue Everywhere

Using PHP to Connect U2 to the Web

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Special Issue MultiValue Industry "End of Year" Recap!

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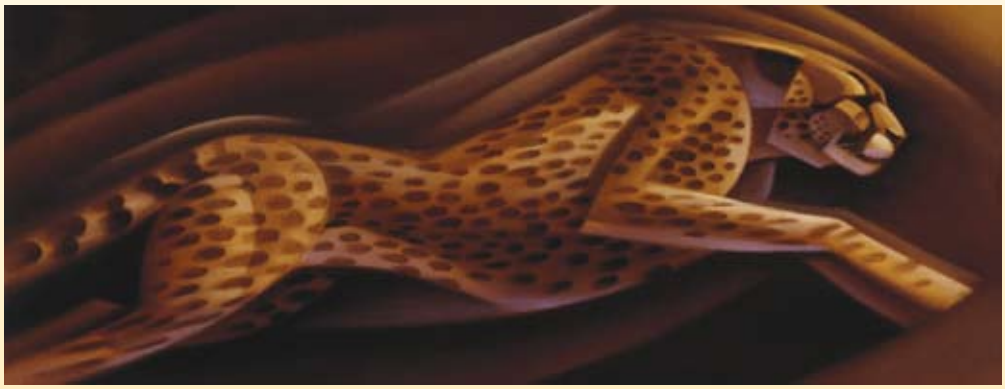

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INTERNATIONAL Spectrum
THE MULTIVALUE TECHNOLOGY MAGAZINE

6 **MultiValue Everywhere – Using PHP to Connect U2 to the Web** Anything Everywhere! What does "Everywhere" mean? It can mean on desktops, on all servers in an enterprise, or it can mean accessible from everwhere, like from the Web. There are numerous ways to make MultiValue data accessible from the Web. This article explores one possibility. **BY KEVIN KING**

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FEATURES | NOVEMBER/DECEMBER 2009

8 **End of Year Recap** 2009 has been a challenging year with most companies and organizations striving to do more with less. Even given the difficult environment, many companies have been creating a number of successes. We asked some of our MultiValue partners to tell us about them.

12 **Business Tech: Becoming a Software Vendor — Part 6** Want to become a Software Vendor? Have the Killer App? Having discussed packaging, presentation, support requirements, distribution channels, and the like, this final article brings it back to several of the key questions. It this right for you? Do you have what it takes to risk failure, and make it a success? **BY CHARLES BAROUCH**

14 **SMS : An Example of Push Technology** E-mail, Twitter, RSS. There are many ways to get the message to your customers and coworkers. One of the methods that will allow you reach over two billions users is to use SMS (Short Message Service) to send text messages to mobile phones. **BY BOB CARTEN, REVELATION SOFTWARE**

28 **Report Mining** Your user-base wants some information. You have it available. After all, there are a couple of reports that produce that data. But no. They want it in a different format, or downloadable as a spreadsheet. So we re-write the Query report as a MultiValue Basic export program, right? Not so fast! There may be other options. **BY BRIAN LEACH**

30 **Purchase of IBM U2 by Rocket Software** October 1st, Rocket Software purchased the U2 assets (UniVerse and UniData) from IBM. We talked with the U2 team about the change, what it meant, and what U2 customers could expect. The answers to those and other questions are summarized in this FAQ. **BY NATHAN RECTOR**

From the Inside

BY NATHAN RECTOR

http://blog.intl-spectrum.com

Happy holidays to all!

It's the end of the year, time to relax and enjoy family and gift giving, and time to start planning for 2010.

Now that 2010 is just around the corner, it's time for me to start talking about what is coming up:

1. The International Spectrum Conference and Exhibition 2010 is in Denver on April 12 – 15. That is less than five months away.
2. Social Media enhancements using Twitter, YouTube, Facebook, and LinkedIn.
3. Desktop and home page widgets to provide software and database tips, resources, and news directly to you.

2010 International Spectrum

Have you taken a look at the conference details yet? If not, please do. You'll find many informative sessions that you shouldn't miss. You will also find some documents and materials on the conference web site to help you justify your attendance at the conference to management.

We all know how hard it is to explain to management why it is important to go to any conference. Look through the materials in the "Why Attend?" section, see sample trip reports, the Letter to the Manager, and other information to help out.

There is also a webinar on January 15, 2010 providing a preview of the conference and providing tools you can use to produce an ROI for attending. Conference information will be provided through RSS feeds and Twitter. There is even a Facebook page dedicated to the Conference for those interested.

If you are having a hard time talking management into paying for the attendance, don't forget that the exhibition floor is FREE to all attendees and walk-ins. This gives you a chance to see all the tools, products, and enhancement from your favorite MultiValue vendors, including seeing new products that would benefit your company's business systems.

To find out more on the 2010 Conference go to the following URL:

www.intl-spectrum.com/conference/Denver2010/

Look for the Conference brochure that will be landing on your desks soon that will contain a lot of helpful information as well.

Social Media

Social media has become an accepted means of communicating resources and other information. International Spectrum enhanced its services to include social media outlets for news, tech resources, and general information.

By the beginning of the year, we will increase our use of Twitter to include more information about the MultiValue industry and to provide other resources (both tech and IT). We will also have Facebook pages to help distribute product specific information.

We have been fairly active on LinkedIn, and we will continue to use it to help with professional networking.

Desktop/Home Page widgets

More and more people are looking to create mashups using Yahoo, Google, and Windows Live to combine all their information into one place. With the releases of the new desktop OSs, desktop widgets are providing the same abilities.

International Spectrum has created widgets for Google and Yahoo for the magazine and newsletter headlines. We will continue to create widgets to provide information to specific database and software needs. Keep a watch for them.

-NATHAN RECTOR
President, International Spectrum
nathan@intl-spectrum.com

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MultiValue Everywhere

Using PHP to Connect U2 to the Web

BY KEVIN KING

It would appear that this little thing we call the Internet is probably going to be around for a while. Wouldn't it be cool if we could leverage all that technology to give people all over the world access to our MultiValue information? Think about it — *MultiValue everywhere!* It makes me all warm and tingly just thinking about it.

"But," you say, "the Web is a new frontier and I don't have time to learn a bunch of complex new stuff!" Believe me, I hear you. However, using the UniObjects connector with UniData or UniVerse, plus a tiny bit of PHP, connecting your U2 application to the Web doesn't have to be complex or time consuming.

In the next few paragraphs we'll take a step-by-step approach to help you with everything you need to get started. Once these steps have been completed, you should have a working web server that can connect to your UniData or UniVerse database, and then you'll be well on your way to mastering this new frontier.

It's important to note that these steps apply to installation of a web server on a basic Windows PC, laptop, or server. For training purposes the system doesn't have to be very powerful, but it is important that it is running Windows. I'll explain more about why that's important as we go along. We're also going to assume you already have a working UniData or UniVerse server somewhere on your side of the firewall. If not, take a moment and install one of the personal editions; you'll be glad you did.

Step 1: Get a Web Server

Most organizations already have a web server, but to keep our valuable system administrators happy we're going to assume that server is hands-off for the moment. Instead, point a browser over to www.apache.org and download and install the free Apache server.

Be advised that during the installation you'll be prompted for a network domain and server name; whatever you enter here will need to be configured as a local host in your Windows hosts file. For example, if you enter a network domain of "myserver.com" and a server name of "www", be sure to change your Windows host file to point www.myserver.com to 127.0.0.1. Other than this detail, you can pretty much choose the default settings for everything else.

Step 2: Get PHP

While the UniObjects connector that we'll use to connect to U2 wasn't specifically written for PHP, it'll work, but *only* on Windows. If you use PHP on anything other than Windows, there are other options to connect to U2 but none are as simple.

To obtain PHP, open a browser and head over to www.php.net. Just like the Apache installer, the PHP installer is almost effortless. You'll want to be sure to select the right Apache version and configuration file during the install, but don't worry too much about all of the other options. PHP comes with an extensive collection of options that do some pretty remarkable things, but for our purposes we shouldn't need any of these just yet. (They can be added later as needed.)

Note: Another way to install Apache and PHP is using the XAMPP installer from the Apache Friends group (intl-spectrum.com/s1028). While it's a great way to get Apache and PHP up and running fast, the XAMPP

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MultiValue Industry's "End of Year" Recap

The "End of Year" recap is a new special feature to International Spectrum magazine that we plan to continue to do at the end of the every year. International Spectrum contacted all of its regular advertisers and conference sponsors and asked them to answer three questions: What new features or services did you introduce in 2009; what was the greatest or most exciting thing that happened to your company or product in 2009; and what would you like Spectrum readers to watch for in 2010? Here are the responses we received:

AccuSoft Enterprises, Peter Schellenbach

Q: ***What new features or services did you introduce in 2009?***

AccuSoft Enterprises showed a preview release of AccuTerm 7 at the Spectrum show in Denver in March. AccuTerm 7 has been extensively re-engineered to take advantage of the new features in Windows 7.

AccuTerm 7 follows the visual theme of the version of Windows it is running under and blends harmoniously with modern Windows applications.

The visual themes are automatically applied to AccuTerm GUI applications. AccuTerm 7 is scheduled to ship before the end of 2009.

Q: ***What was the greatest or most exciting thing that happened to your company or product in 2009?***

Release of AccuTerm 7.

AdvancedWare, Paul Batten

Q: ***What new features or services did you introduce in 2009?***

AdvancedWare expanded its .NET-based Storefront and Portal solutions that are real-time integrated with UniVerse/UniData. Along with a turnkey solution which includes the user interface pages, the system also now comes with a complete set of web services for the various Storefront and Portal functions. This lets our customers completely manage the web user interface in whatever way they want but still tie into the real-time web services which handle the integration with UniVerse/UniData. For example, our customer might have a web site with product display pages but they would like to use web services to display product price and availability from their UniVerse or UniData system.

Q: ***What was the greatest or most exciting thing that happened to your company or product in 2009?***

Customer loyalty during the tough economic times really helped AdvancedWare stay successful. AdvancedWare would like to express our sincere thanks to all of our customers.

Q: ***What would you like Spectrum readers to watch for in 2010?***

Providing solid real-time business bolutions for UniVerse and UniData that work on any device such as the mobile phones (portals, business intelligence reporting for management, etc). 2010 is the year to use that cell phone to help manage your business and not just make phone calls (and listen to music).

BlueFinity International - a member of the Mpower1 Group of Companies, David Cooper, Lead Developer

Q: ***What new features or services did you introduce in 2009?***

2009 saw two new major product releases from BlueFinity: our SSIS connector (mv.SSIS) and our business objects access layer generator (Solution Objects).

mv.SSIS is a datasource connector for use with Microsoft's SSIS product and allows SSIS to seamlessly connect into MultiValue databases to automate the process of moving MultiValue data into MS SQL. The unique aspect about mv.SSIS is that everything is performed within the native SSIS design and debugging environment. Basically, if someone knows how to use SSIS, they will automatically know how to use our mv.SSIS product.

Solution Objects is a significant new functional addition to our flagship product mv.NET. It allows developers to create powerful object-based access layers to their MultiValue database and provides not only the design-time definition tools but also the code generator and runtime support assemblies to manifest these definitions in code.

Q: ***What was the greatest or most exciting thing that happened to your company or product in 2009?***

Without doubt it was the launch of Solution Objects in September of this year. Solution Objects provides so many benefits to the .NET developer needing to access a MultiValue database. It exposes the MultiValue data as a standard strongly-typed Visual Studio datasource, which means that any tool that understands how to use a Visual Studio datasource (which in practice means just about every data related Visual Studio tool on the market) will be able to access your MultiValue data. Solution Objects also allows the MultiValue database knowledge within an organization to be encapsulated within a formal object-based access layer, which means that .NET developers who know little or nothing about MultiValue databases can work with the database in a natural .NET way.

The classes generated by Solution Objects are packed full of functionality: lazy (delayed) data loading; optimistic and/or pessimistic locking; stateful and/or stateless connections; transaction boundaries, and lots, lots more!

Q: ***What would you like Spectrum readers to watch for in 2010?***

The current release of Solution Objects is just the beginning for the product! There is lots of additional functionality coming out next year, including support for SQL and MultiValue database access within the same single data access layer; automatic built-in LINQ support within the generated classes; Silverlight integration; .NET data binding enhancements and a whole bunch of exciting and innovative technologies that will provide a level of .NET accessibility to the MultiValue data model that has never been seen before.

BlueFinity is absolutely committed to opening up the MultiValue database to the whole .NET development community in a way which is natural and efficient for that group of developers. We in BlueFinity see a very bright future for the MultiValue database within that community and we look forward to being able to present the inherent benefits of the MultiValue model (which we all know are there) to that development community in an industry standard and easily consumed manner.

Entrinsik, Sharon Shelton

Q: ***What new features or services did you introduce in 2009?***

In June, we announced the general availability of Informer Web Reporting v4.0, providing organizations with unprecedented information access to multiple databases. Informer now enables users to quickly connect multiple sources of data to a single web reporting engine to easily navigate, assemble, schedule, and deliver reports. Informer pulls together data silos without relying on a data warehouse or centralized data mart. And with Informer's intelligent caching mechanism, users can sort, filter, group, analyze, and chart results without bombarding the database server with repetitive requests. Intuitive ad-hoc report and customization capabilities mean end users can now query any data source, regardless of where it is stored across relational or MultiValue data, to build their own reports, and get fast answers to their own questions.

Q: ***What was the greatest or most exciting thing that happened to your company or product in 2009?***

The recessionary environment has made it even more crucial for organizations to find solutions that improve decision-making and provide bottom line value quickly, and Informer v4.0 was designed to deliver a rapid ROI. While many organizations did not initiate new ERP system purchases, many invested in Informer to gain greater value from their existing ERP databases. Our Partners noticed the same phenomena as well. This plus the powerful new features of our 4.0 release stimulated the addition of several new Partners cov-

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MULTIVALUE INDUSTRY'S "END OF YEAR" RECAP

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ering the manufacturing, distribution, and construction industries.

With the launch of Informer Web Reporting v4.0, we've really set ourselves apart from other operational reporting and analysis solutions on the market. Unlike other BI solutions, Informer does not require organizations to set up and maintain a separate data store because it provides native database connectivity to most industry-standard commercial databases —MultiValue or SQL. No complex ETL processes, data warehousing, or data cubing. And to maximize performance speed, Informer employs native query commands and Web server caching to accelerate data retrieval and deliver flexible, rapid data manipulation capabilities.

Q: ***What would you like Spectrum readers to watch for in 2010?***

With the completion of Informer 4.0 database extensions and minor feature requests, we look forward to turning our R&D department loose on all of the new ideas that have been submitted by our customers and our engineers. Our existing customers have watched earlier versions of Informer expand in functionality, applicability, and performance. And ongoing enhancements will provide even more extensive data output and manipulation options. Entrinsik's Informer development staff has earned a reputation for responsive and creative product development and we are looking forward to continual product enhancement in 2010 and firmly establishing Informer as the leading self-service operational reporting and analysis solution on the market.

InterSystems

Q: ***What new features or services did you introduce in 2009?***

InterSystems DeepSee became available to the CACHÉ MultiValue customer base in first quarter 2009. There is a growing demand for operational business intelligence that is available in real time. DeepSee delivers embedded real-time business intelligence which means that InterSystems' application partners have the ability to provide dashboards and key performance indicators in their MultiValue-based application product lines. Consequently their end-user customers have timely information to support optimal operational decisions and increased operational efficiencies as well as to search for new revenue opportunities.

In addition, InterSystems introduced built-in reporting. The new Zen reports, built into CACHÉ, eliminate reliance on expensive external reporting tools. Developers have easy access to advanced reporting capabilities and IT departments realize significant cost savings. For large enterprises, those savings can mount up to tens or even hundreds of thousands of dollars. Reports can be generated in HTML, .PDF, and Post-

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Q: ***What was the greatest or most exciting thing that happened to your company or product in 2009?***

In a difficult worldwide economic situation, InterSystems has continued to invest and grow. By the end of 2009, we anticipate our total employment will have grown by over 20% during 2009 as we continue to increase our development, delivery, and support staff.

Q: ***What would you like Spectrum readers to watch for in 2010?***

This is a time of great uncertainty for the world economy, for the IT industry and for MultiValue community. InterSystems has a consistent, long-term vision to which the entire organization is committed on an ongoing basis. In 2010, the MultiValue community should see more of the same from InterSystems:

- More Innovation in our product lines
- Continued devotion to the principles of long term partnerships
- Attention and support for our partners

jBASE International - a member of the Mpower1 Group of Companies, Pete Loveless, CEO

Q: ***What new features or services did you introduce in 2009?***

If the introduction of jBASE 5, the first 64-bit MultiValue database, was not significant enough, we also recently introduced a major enhancement to our jEDI Development Kit. The jEDI (jBASE External Device Interface) enables applications to achieve seamless integration with foreign databases without any changes to the jBASE MultiValue BASIC application code and logic. Data can be stored in an external database such as Microsoft SQL Server, Oracle, or IBM's DB2. The enhancements radically improve the jQL performance for the entire jEDI suite. Recent benchmark results demonstrated performance levels very close to — and in some cases surpassing — native jBASE files.

In terms of services, we offer a new migration package for users of other MultiValue databases to move to jBASE 5. We're offering significant discounts on migrated licenses and big savings when it comes to support and services as well. At 17% of license list price per year, fixed for two years, and payment not due until the system goes live, our migration support package it is extremely attractive.

Q: ***What was the greatest or most exciting thing that happened to your company or product in 2009?***

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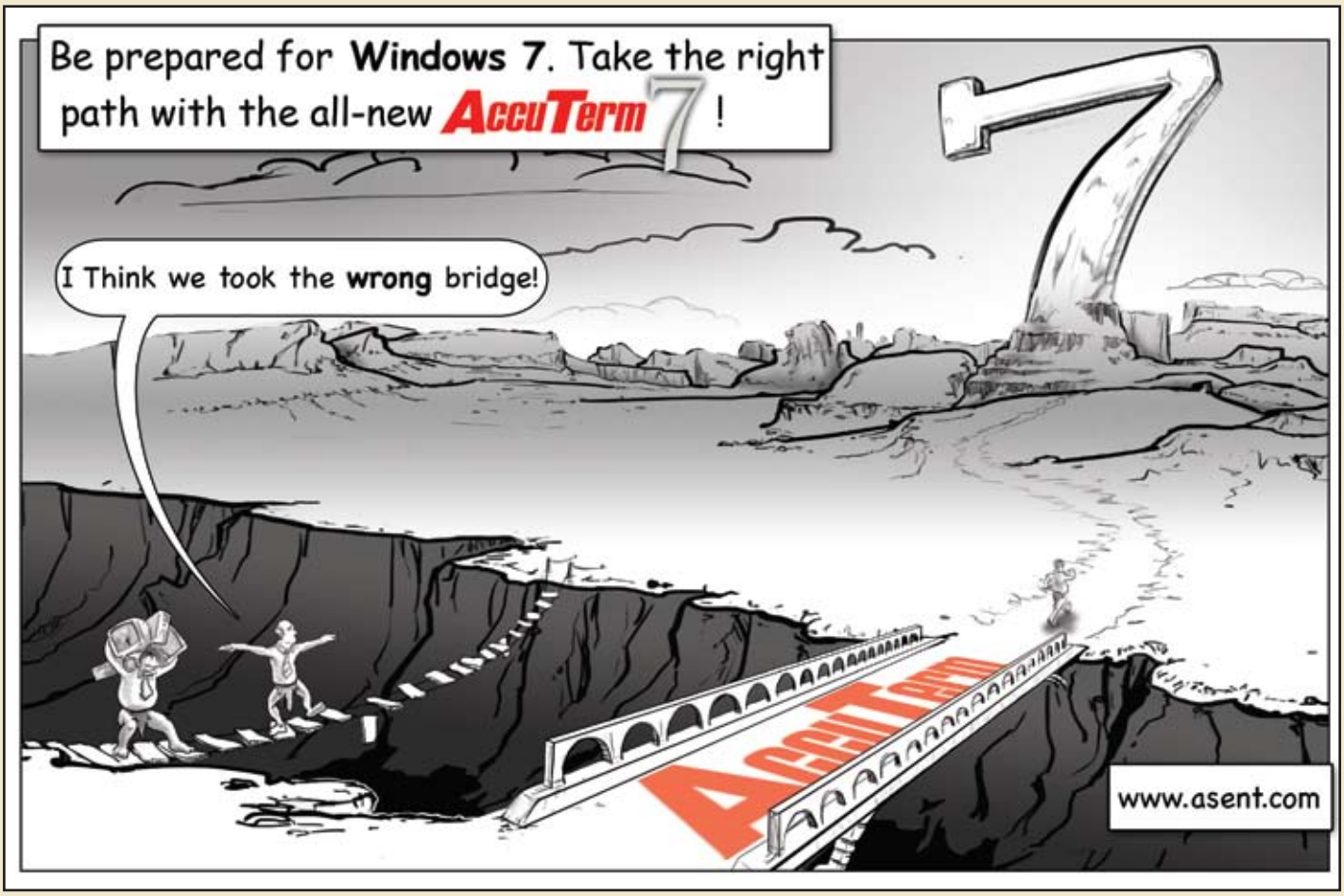

BY CHARLES BAROUCH

Business Tech: Becoming a Software Vendor

Part 6

So far in this series, we've talked about customers, partners, investors, and employees. Now we need to talk about you. Somehow, you've become interested in becoming an entrepreneur. Whether you leave that as a wistful thought, pursue it part-time, or drop everything and mortgage the house for it, you think this might be your better life. We will talk about the upside of taking the plunge, but first, here's a last dose of pessimism before we get to the positives.

My Own Boss

Funny thing is, as a small business owner, I'm at the beck and call of my customers. The bank has an opinion on how I do business, as does the government. More importantly, my family is affected by my choices and that means that they have input as well. So, while I am "the boss," I am certainly not my own boss. As an executive at Salant, which was a multi-national, half billion dollar company while I was there, I often had more leeway than I do in my own business. I certainly had more access to funding and staff.

The Money Just Keeps On Coming

Ask anyone in the software business and they will tell you that people complain about paying maintenance. At some level, they have to know that if they don't pay, the people they count on for support and upgrades won't be there when they need them. So, while many people believe that they can make a living on recurring revenue, it is becoming a hard model to make work. The downturn in the economy isn't helping any of us tell that story.

I Like Telling People What To Do

If being in charge is your motivator, find another motivator. The best people work best with a very light hand on the wheel. You'll want the best people for your business. If you really want to be the order giver, look for a business or department which hires unmotivated or untalented people. They need direction more than they need leadership.

Not All Gloom and Doom

There are upsides to creating your own software company. The ability to create jobs and fill them with gifted people is a huge perk. The ability to reach out into the customer base and improve things is a good return on all of your effort. There's a magic in putting this all together and pulling it all off. Assuming we want to be in business to make things better, we are in the right business.

I like the feeling I get when I can come home at night and know that I've improved someone's life by my actions. I like creating opportunities for good people to do better. There is a sense of personal empowerment that comes with ownership.

Despite the ebb and flow of demands around you — from employees, investors, and customers — there is a sense of self that changes when you are the boss.

It may seem odd to some people, but I'm hoping that most of you never step into this world. Not because I wish you ill, or fear the competition, or any other negative reason. This life is not for everyone. For those of you who belong in this particular category, please read and proceed. Your contributions are needed and your skin is thick enough for the abuse to come. It is a good thing that not everyone fits this mold. At the end of the day, someone has to grow crops, someone has to build houses, and — oddly — no one has to build software.

What we do is a luxury. Businesses have been businesses for a really long time before computerization. People used to get through their day without YouTube and the iPhone. Many still do. As much as we love our industry, we have to honest about it. We provide an easier way. We add speed and ease, but we are not the only way to a goal. There is a difference between making life possible and making life better. You need to be happy with your choices if you are going to build the next great thing.

Taking the Plunge

Many years ago, my wife and I interviewed a couple who wrote, drew, and produced comics. So I asked them, "What made you decide to take the plunge, give it all up, and do this instead?"

Richard, the husband, looked at me as if I'd grown three heads. "We never did," he replied. "We did this on the side until it was profitable. I didn't quit my job until this was a job."

When Bob Coltun and I started Mount Olympus Systems (MOS), we both had other work. When MOS proved to be too light a craft to carry all of our financial needs, we continued with our lives. This does not have to be a plunge if you don't want it to be.

> *Assuming we want to be in business to make things better, we are in the right business.*

Granted, we had no investors. Investors tend to want to see you fully committed before they commit money. Likewise, full-time employees often get nervous if the boss is a part-timer who could, in a financial sense, safely drop the business tomorrow. So, you need to right-size your business to match the product and to match your risk factors. Remember, your choices imply things to others.

What If I Fail?

Great people fail all the time. There are endless quotes about failing; look them up. When I do anything, I allow for the possibility of failure. As I have said previously, that limits my success because most truly successful people, just like most massively unsuccessful people, pick one goal and cling to it without a thought of a plan "B" anywhere in their worldview. There are exceptions. Some people, like Edison, could come up with an idea, ride it to a logical conclusion, and the come up with the next idea. His resilience was his real strength.

Personally, I'm really good at failing. I've certainly had enough experience. From that, I've learned how to plan better, how to execute better, and how to allow myself to fail without falling apart. That's all part of the tough skin you need for this sort of life.

Curtain Call

It is hard to believe, but I've been writing this series on entrepreneurs for a year now. Next issue will belong to a new year and a new topic. Writing columns like this is doing what I love. If building your own business is what you love, you need to pursue it even if you fail the first time.

The good news is that we all get more than one chance at happiness. We all have room in our lives for more than one kind of happiness. After writing about this for a year, I am gearing up to go back into the packaged software business. It isn't a fast ride, so you may get there first, but I am on the road again. IS

CHARLES BAROUCH is the CTO for Key Ally, Inc. He is current President of the International U2 Users Group, and a regular Spectrum Magazine contributor.

Contact Charles at Results@KeyAlly.com, or phone (718) 762-3884 ext 1.

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BY BOB CARTEN, REVELATION SOFTWARE

SMS:

An Example of Push Technology

Overview

Multiple articles in the Sept/Oct 2009 issue of *International Spectrum* discuss integrating with social media such as Twitter and Facebook, including a nice example of using the Twitter API to send a message. The following article continues that theme, from a slightly different viewpoint.

The meat of this article is how to send and receive SMS messages using a GSM modem. The viewpoint is that sending text messages is just one of a family of techniques known as push technologies implementing a communication known as "publish and subscribe". E-mail, RSS, Twitter, and chat are other examples of push technology.

In the "publish and subscribe" pattern, the publisher allows one or more people to enroll to receive messages and the subscriber agrees to allow the publisher to send messages. The different technologies differ in the degree of coupling between publisher and subscriber(s), the degree of latency between initiation and receipt, and, of course, the transport technology.

E-mail and SMS have the loosest coupling. When you get an e-mail address you have to subscribe to every e-mail publisher on earth. RSS and Twitter subscriptions are more tightly coupled; one or both parties deliberately create subscriptions. In most push technologies, the transport will incorporate a public network, either the Internet or the mobile telephone infrastructure.

"Rich versus Reach" is another differentiator for these publish and subscribe technologies. Rich refers to the amount or complexity of the message. Reach refers to the number of people who have the ability to receive the message. A person who does not have a device and network to receive the message is out of reach.

Push technology adds another factor to reach — timeliness or velocity. If a message always arrives at a device but arrives too late, that device is out of reach. E-mail sends very rich messages but requires a certain amount of infrastructure and a certain amount of attention from the recipient. Text messages are limited to 160 characters, but fit a network, a device, and a lifestyle that is within reach of most people in the world. If "reach" is the primary concern of your push technology, text messaging may have a role.

E-mail to SMS

You have technology options available for sending text messages. The simplest option is to send an e-mail to a mobile phone number. Most mobile operators have a standard e-mail gateway. If you know the service provider then you just append it to the phone number. The benefits of this approach are its simplicity. The costs are that the recipient cannot reply to you, and, with the advent of number portability, there is not a reliable way to determine the service provider from a phone number.

SMS Relay

You can subscribe to a relay service or SMS gateway that will send your messages for you. Typically, you send a web request to their server, and they route the message to the correct provider. These services are geared toward publishers who send thousands of messages per month. They offer one-way broadcasting or two-way messaging with the ability to have your service hosted by one phone number or even a short-code.

If you want to vote for your favorite musician or ticket giveaways, these services are for you. There is plenty of information on the web. See developershome.com/sms/ for an overview. Skype and Google also have SMS capabilities. You can use these services as gateways also.

SMS Modem

You can attach a cellular modem to a computer, install gateway software, and become your own SMS gateway. For proof of concept, you can simply attach a GSM cell phone with a USB cable. Industrial cellular modems have evolved a lot of the last few years. Multi-Tech is one manufacturer of these modems. You can purchase a standalone modem to connect with a PC-based gateway, or

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SMS: AN EXAMPLE OF PUSH TECHNOLOGY

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you can purchase a turnkey system with its own web interface. One modem can handle about 30 messages per minute. For more throughput, you can add more modems.

The benefit of using your own modem is that you are independent of the Internet or any third-party SMS gateway. This independent channel can be useful for mobile applications, or for out-of-band authentication, where your secure web-login requires a user to re-enter a code which you send to their mobile.

Gateway Software

Running your own SMS gateway will require software as well the modem hardware. Various commercial packages exist — some associated with mobile vendors and some by independent parties. The commercial applications are likely to work well with whatever modem you use. There is an open source product named Gammu that works pretty well.

Gammu runs on Linux or Windows and can run as a service (Gammu:SMSD). To interact with the service, you place outgoing messages in one table and read incoming from another. Gammu can use SQL tables or subdirectories with plain text files. The code example in this article use the file-based interface.

How to Use Gammu

You can find Gammu downloads and documentation at cihar.com/gammu/

The steps to use Gammu are:

1. Download the version for your platform,
2. Install,
3. Edit the config file as needed for your modem and subdirectories, and
4. Write a program to deposit messages into the outbox.

Rich refers to the amount or complexity of the message. Reach refers to the number of people who have the ability to receive the message.

The documentation is not very clear, but the process is simple. The documentation discusses modifying the "connection" setting for various phone types. I found that using the generic AT connection with the correct baud rate for my modem worked well.

Example Gammurc file

Gammu settings are controlled by a configuration file named Gammurc located the bin directory. Edit this file for your situation. For my Multi-Tech modem on Vista I found that "connection =AT115200", "port=com3:" are the magic settings. For testing, I set debugmode=255 and added a log file (fig. 1 and 2).

Sending and receive messages

With Gammu configured for files mode, sending and receiving messages is trivial. You simply write or read a text file whose name is formatted the way Gammu expects. Figures 3 and 4 show some sample code written in OpenInsight Basic+.

Conclusion

SMS may have a role to play for you. SMS is a push technology you can succeed with today. SMS has the highest

```
[gammu]
smssendfile =
smssend = yes
features =
name = Set1
usephonedb = no
port = com3:
model =
connection = at115200
synchronizetime = no
logfile = c:\revsoft\oasl\sms\gammulog.txt
logformat = errors
use_locking = yes
gammuloc = locfile
startinfo = no
gammucoding = utf8
DebugLevel = 255
```

Fig. 1 Gammu Settings

```
[smsd]
Service = FILES
PIN =
LogFile = c:/revsoft/oasl/sms/syslog.txt
InboxPath = c:/revsoft/oasl/sms/inbox/
OutboxPath = c:/revsoft/oasl/sms/outbox/
SentSMSPath = c:/revsoft/oasl/sms/sent/
ErrorSMSPath = c:/revsoft/oasl/sms/error/
DebugLevel = 2
CommTimeout=20
TransmitFormat=utf8
```

Fig. 2 Gammu:SMSD settings

reach factor in the rich versus reach balance of current push technologies. You can include a URL in your message and users with smart phones can open the link, making SMS a push gateway to rich content. I recommend that you view SMS as starting point in your adoption of push technologies and isolate the push subroutines so that you can dynamically substitute increasing rich technologies as the customer base evolves.

```
function gammu_smsd_out(text, phoneNum)
/*
**  Format Outgoing GAMMU-SMSD message
*/

if Assigned(text) Else text = ''
if Assigned(phoneNum) Else phoneNum =  ''
If phoneNum = '' Then
     phoneNum = "1555123456"
end

if text = '' Then
     text = "Hello World " : TimeDate()
end

if phonenum[1,1] # "+" Then phonenum[0,0] = "+"
folder = "c:\revsoft\oasl\sms\outbox\"
odate = Oconv(date(), 'D4-')
yyymmdd = Field(odate, '-',3):Field(odate, '-',1):Field(odate, '-',2)
hhmmss = Oconv(time(), 'MTS')
convert ': ' To '' In hhmmss
outfile = folder : "OUTG_":yyymmdd :'_':hhmmss:'_':phonenum:'.txt'

OSWrite text On outfile
Return ''
```

Fig. 3 Program to send a message

```
function gammu_smsd_in(void)
/*
* Read GAMMUS SMSD messages
* Run this program to opoll for messages
*/

$insert SMS_PARAMS_EQUATES
sms_params = Xlate('SMS_PARAMS', 'SMS_PARAMS', '', 'X')
allowed_mobile_phones = sms_params<6>
convert ',' To @vm In allowed_mobile_phones

* Find Messages in inbox
datapath  = sms_params<SMS_PARAMS_DATAPATH$>
inbox =datapath:'\inbox\'
initdir inbox:'\IN*.*'
files = ''
loop
     list = DirList()
until List = ""
     files<-1> = list
repeat

fcount = Count(files, @fm) + ( files # '' )
For i = 1 To fcount
     fname = files<i>
     sender_phone = field(fname, '_', 4)
     If sender_phone[1,1] eq '+' Then sender_phone[1,1] = ''
     * ignore unauthorised messages
     locate sender_phone In allowed_mobile_phones using @vm setting pos then
          OSRead message From inbox:fname Else message = ''
          Gosub ProcessMessage
     end
     OsDelete inbox:fname
next

return ''
```

Fig. 4 Program to receive a message

More Information

Overview:
www.developershome.com/sms/

Example Bulk Gateway:
www.clickatell.com

Commercial Gateway:
www.intellisoftware.co.uk

Open Source: cihar.com/gammu IS

ROBERT CARTEN has over 30 years experience in the software world, with over 25 of those years using Revelation products. He has been teaching Revelation training courses since 1999. and has worked with many of the major Database products on Windows, Unix, IBM, and Linux platforms. Robert has pioneered enabling OpenInsight applications to integrate and distribute across platforms and technologies. Robert has a Bachelor of Arts in Physics from Grinnell College and a Bachelor of Science in Mechanical Engineering from Columbia University.

MULTIVALUE INDUSTRY'S "END OF YEAR" RECAP

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Without a doubt it was the launch of jBASE Release 5. Now available in Beta, jBASE 5 brings MultiValue users closer to the mainstream than ever before.

jBASE 5 is a true 64-bit MultiValue database. Whereas other MultiValue databases might have added 64-bit addressing to overcome 2GB file sizing, jBASE 5 is a complete 64-bit implementation of the database. There are therefore no hidden 32-bit addressing limitations and complex and large applications can be handled with ease.

jBASE 5 brings mainstream file and system resiliency to MultiValue applications through the introduction of the Dataguard Suite. The file system has resilient and automatic resizing jR files and, within Dataguard, we have introduced file checkpointing, warm-start recovery, and online backup and restore. These features allow jBASE to operate non-stop as a technology platform. Many of these features are standard within DB2 and Oracle systems. They are now standard to jBASE.

Q: ***What would you like Spectrum readers to watch for in 2010?***

jBASE International is committed to helping our customers leverage the latest technologies while still retaining the fundamental value in their MultiValue investment. In addition to the general release of jBASE 5, we will focus on extending the existing functionality within jBASE with the very latest Microsoft .NET and Java development tools. With enterprise class Java support delivered by a new JDBC and J2EE Connector Architecture (JCA) enhancements to jBASE Basic together with new jRemote Java functionality, and enterprise class Microsoft .NET support provided by mv.NET with its new Solution Objects functionality and jRCS, you get an exciting time to be a MultiValue developer. When was the last time you could say that in our market?

With the long-term commitment from Mpower1 International to jBASE and to sister company, BlueFinity International, there has never been a better time to be a MultiValue user. jBASE users are going to have a great 2010!

Key Ally, Inc, Charles Barouch

Q: ***What new features or services did you introduce in 2009?***

Web and GUI work is continuing to increase. More and more, I have to be able to put a modern front-end on even 'quickie' projects.

Q: ***What was the greatest or most exciting thing that happened to your company or product in 2009?***

The sale of U2 to Rocket — It changes the landscape for the entire community. The signs of re-invigoration at Tiger Logic and the new directions coming from Northgate-IS are very encouraging. Watching OpenInsight roll out new web initiatives has got my interest as well.

Q: ***What would you like Spectrum readers to watch for in 2010?***

Increased visibility. And that isn't just the vendor's job. We all need to get our business hats firmly clamped onto our technological heads so that we can prove value. The successes are there, we just need to get better at telling those stories to the wider audience.

Kore Technologies, Keith Lambert

Q: ***What new features or services did you introduce in 2009?***

Our best-in-class MultiValue integration solutions — Kourier Integrator for U2 and SQL Accelerator — continued to improve with new product releases. The primary focus was on providing additional functionality, improved performance, and productivity enhancements. A key new feature was the ability to extract data from multiple files sharing the same data structure (e.g., comma files or yearly transactional files) using just one export template — accelerating implementation and reducing administration.

Our KommerceServer eCommerce solutions saw many new features and capabilities added for the consumer market. Most significant was a new multi-store architecture that supports multiple brands or product lines within a single online storefront. This makes it easier to promote cross-brand marketing and sales while greatly streamlining the online shopper's experience. Also introduced was a new web development framework, which provides a foundation that makes developing web applications easier while providing for improved end-user customization.

Kore has been working to build a network of partners who sell and support Kore products in their vertical or area of expertise. The result is that we expanded our partner and VAR network domestically and internationally. This has allowed Kore to extend our reach and footprint into areas, applications, and territories that are typically difficult to penetrate due to subject matter expertise, etc.

Q: ***What was the greatest or most exciting thing that happened to your company or product in 2009?***

With the tough economic conditions of 2009, Kore has been fortunate to have expanded operations during these challenging times. Our product and service diversification has been one of the primary keys to our success.

One of the most exciting developments for Kore in 2009 was that we have been able to diversify our product and service offerings even further via our partnership with Demand Solutions — a market leader in Forecast Management, Requirements Planning, and Advanced Scheduling software. This new partnership allows Kore to leverage its extensive supply chain and

integration expertise while enabling us to sell, implement, and support additional best-in-class, value-based solutions to our clients.

With this new partnership comes an excellent opportunity for Kore to grow in many new areas and directions, building upon our many years of experience developing and implementing integrated software solutions for the manufacturing, distribution, and retail industries.

Q: ***What would you like Spectrum readers to watch for in 2010?***

The UniData and UniVerse (U2) databases are excellent embedded databases, however, the need for companies to support multiple heterogeneous databases and applications to run different parts of their business will keep growing. This will not only challenge the IT group with managing an increasingly complex environment, but users will require improved reporting and business intelligence solutions across databases and applications. Look for Kore to respond to these challenges with new products and services that expand our integration suite beyond U2 to SQL, and include the ability to integrate any database to any database. Moreover, Kore plans to develop integrated business intelligence solutions for key applications and industries.

Developing robust web applications is still too slow and time-consuming. Look for Kore to release new web development tools that help developers build and deploy web applications faster and easier while embracing the best architectural practices. These tools will increase developer productivity and shorten the time to market for new web applications.

Kore will look for additional partners to expand our partner network with companies that have products, services, and subject matter expertise in key verticals and products that would complement Kore's products and services.

LadyBridge Systems, Martin Phillips

Q: ***What new features or services did you introduce in 2009?***

The QM development strategy is one of continual enhancement to meet customer demands in very short times rather than one of infrequent big releases. The QM market has continued to grow in a tough economic climate and we have worked closely with our dealers and users to make migration to QM even easier. We have several dealers currently working to move all of their clients to QM from other MultiValue environments.

Alongside a large number of compatibility features, we have added support for distributed files, concurrent index creation/build, and many extensions to QMBasic and the command language. New data transfer tools simplify the process of moving data and applications from other environments.

Support for applications that have users spanning time zones has been improved by provision of an epoch-based date/time mechanism that identifies a moment in time independently of the user's time zone. Conversion codes are available to translate this value to and from a user's local time when needed.

The range of platforms support by QM has also grown with certification on the new Windows 7, on Mac OS X 10.6 (Snow Leopard), and a port to AIX.

Our new two-year staged payment competitive upgrade pricing policy means that the cost of moving to QM can be lower than the annual maintenance costs for other systems.

Q: ***What was the greatest or most exciting thing that happened to your company or product in 2009?***

We already have many users in the medical arena, but QM has been chosen as the underlying database for a major new medical system running on Apple Mac servers with potential for worldwide deployment. It is too early to say much about this but details will be announced as soon as possible. As of October 2009, the system is in beta testing with 500 users spread over five states of the USA.

This system uses some exciting new third-party web application development tools that should be available for demonstration at the 2010 International Spectrum conference.

Q: ***What would you like Spectrum readers to watch for in 2010?***

Alongside our usual continual development program, some of the key things planned for 2010 include an "interfaces" release to make it easier to access a QM database from a variety of other environments, internal changes to the query processor to provide significant performance benefits, and support for data replication to hot standby systems. The query processor changes also open the possibility of support for user written back ends for special data output formats.

Despite the often voiced feeling that MultiValue databases are on the decline, QM continues to attract new users. Approximately 10% of users purchasing QM licenses are new to MultiValue. With this in mind, we are launching a self-study training package that can be used by total beginners or by experienced programmers moving from other systems. Feedback from users working with the development versions of this package has been good.

MITS

Q: ***What new features or services did you introduce in 2009?***

2009 brought several significant additions and many incremental improvements to both of our products.

MITS Discover 7.1, released in August, adds scheduled, automated email distribution of summary management information, fully respecting the security model that is built into the product.

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Additionally, analysis of information from different areas can be compared at a summary level in a single report. For example, while reviewing sales revenue driven by invoicing activity, a user can add columns to a report showing the inventory stock levels of a product at different points in time. This cross-department view of activity or asset summaries is a very powerful addition to the product.

MITS Report version 2.0.2, released in October, is an incremental update to our operational reporting system. With support for MultiValue as well as relational databases, MITS Report helps integrate the various data silos that seem to always find their way into an organization's data center.

In 2009 we were very fortunate to welcome many new companies and several new partners to the MITS family.

Q: ***What was the greatest or most exciting thing that happened to your company or product in 2009?***

While many see 2009 as a year of challenges, and it certainly has been, we view it as an opportunity to confirm the basic "value proposition" of the MITS products. By providing better access to information, and in-depth analysis of operational results, MITS Report and MITS Discover help organizations make the most of their limited resources, and make better decisions with the information that they already have. Progressive companies understand the value of doing more with less, and many have moved forward with the addition of MITS to their system.

Q: ***What would you like Spectrum readers to watch for in 2010?***

At MITS, we consider the discipline of data access, visualization, and analysis to be in a relatively nascent stage. We are hard at work taking our products to new levels, bringing significant innovation to the task of making corporate information more accessible and more useful.

Northgate Information Solutions

Q: ***What new features or services did you introduce in 2009?***

Northgate has increased its commitment to customers by offering long-term support and flexible license models to help organizations through this tough economic climate. The introduction of application support services via call-up and draw down support has proven extremely popular with Northgate's existing customer base within the US. 2009 saw the majority of enhancements to the already proven web service, XML, SQL, data encryption, and failsafe functionality all helped our customers achieve new heights and secure Reality's place within their organization.

Open QM

"The quality of QM/Linux is outstanding! In 25 years,the best yet. Ladybridge are very responsive to our varied needs and special requests."

Sally Crowell, President, Crowell Systems

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Q: *What was the greatest or most exciting thing that happened to your company or product in 2009?*

While the market is shrinking, in the past year, Northgate has doubled the size of its U.S. operation to handle the resurgence of interest in the Reality product. The appointments of Mark Pick, Mark Fuller, and Gail Lawrence to the Reality team was just the beginning of the strategy to build the most committed MultiValue offering the market has seen for years.

2009 saw a 400% increase in downloaded trial versions and the addition of many new clients and a pipeline of interest that is likely to be second to none. 2009 also saw Northgate commit over $1 million of additional investment into the Reality product to help implement market demands, including some new features and case insensitive functionality.

Northgate also secured several new strategic partnerships which it will capitalize and go to market within the coming months. Not only does Northgate remain committed to the MultiValue market from a product perspective, but it announced its commitment to provide support contracts for many years into the future, which was fully welcomed by the market. Northgate continues to believe and stand by its commitment to customers. "When you succeed, we succeed."

Q: *What would you like Spectrum readers to watch for in 2010?*

Northgate has many exciting progressive plans in store in the coming months and remains committed to its customers, openness, growth, and the longevity of the MultiValue marketplace! Cloud computing, Software as a Service (SaaS), a browser-based dashboard, hosting, and case insensitivity are just to name a few. All of these exciting offerings will be realized by capitalizing on the newly appointed strategic alliances that were secured in 2009. Northgate continues to take customer feedback very seriously when developing its product roadmap, so watch this space for more exiting offerings!

Nozumi Solutions, Cedric Fontaine

Q: *What new features or services did you introduce in 2009?*

In 2009, Easy Soft released Winnix Mobile for Windows Mobile 6, a true emulator with graphical capabilities for PDA, the only product of this kind for the MultiValue market.

Also, we released a beta version of Winnix 3 with a lot of improvements and reworks: ready for Windows 7, print wizard integration, device licensing for QM, and many more.

Q: *What was the greatest or most exciting thing that happened to your company or product in 2009?*

Some Spectrum visitors asked us for a way to sign or draw using the stylus on the PDA, on Winnix Mobile. Shortly after, we brought this wonderful idea to life. We are very excited by all the things we can do on a PDA using Winnix Mobile.

Q: *What would you like Spectrum readers to watch for in 2010?*

2010 will be the mobility year and also we'll work on SaaS. Software as a Service is a new way to sell software for us. Users are waiting for more than just SSH access to a MultiValue database. We'll focus on bringing our solutions to the Web and sell them as a service. Mobility and web access from the iPhone should be considered as a major avenue.

Revelation, Robert Catalano

Q: *What new features or services did you introduce in 2009?*

2009 proved to be a very busy year for Revelation Software. In January, we released OpenInsight Development Suite 9.0 which included many new features to the product including: WebOI (a web enablement and development toolkit), a new IDE for the Application Manager, a new System Editor++, the inclusion of the Bravo Dashboard from Sierra Bravo Corporation, and a new .NET version of the OIPI print engine. We also bundled our network product, the Universal Driver, with the purchase of a new license.

In August, we released a new version of our network driver the Universal Driver 4.6. The UD 4.6 is offered in two versions, the free bundled version supplied with OpenInsight 9.x network user licenses (NUL) and the standard version to be used with OpenInsight 8.0 and below as well as Advanced Revelation.

Initially we were planning on a patch release to OI 9.0 but as more and more new features were added to the product we decided to do a full product release. In September, we released OpenInsight Development Suite 9.1 which includes NetOI and RevDotNet. OpenInsight 9.1 has been extended to allow .NET integration using two different methodologies. Using the NetOI .NET assembly, developers can code entirely in Visual Studio and develop a Windows application that utilizes OpenInsight as its data source. RevDotNet is a set of API calls made from within OpenInsight to a .NET control.

Q: *What was the greatest or most exciting thing that happened to your company or product in 2009?*

First and foremost was the hiring of two very talented individuals: Jared Bratu and Erik Smith (both of whom are in their twenties). They both bring a fresh perspective to our product design and development. Secondly, we have weathered this recession without compromising product development and customer service. It has been a difficult year for many of us, but I feel we

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NEWSMAKERS

Southeast Community College Cuts Data Mining & Evaluation Time with Informer

Situation

The IT team needed to decrease reporting and analysis time for monthly retirement deposits for over 700 employees on the payroll.

Challenge – Speed Data Collection & Evaluation Time

Duane Roth, IT Programmer/Analyst and the team at Southeast Community College require a monthly upload be processed for all retirement deposits for 700+ employees on the payroll. This data file must be sent in a specific file format with a minimum of five records per employee configured with specific field lengths.

Several years ago they were using a well-known report writer to create the multiple records required. The collection process took nearly one hour to format the data for all 700+ employees and send that output to an MS Excel file for further manipulations. The Excel file was then put into a COBOL program, and the pre-defined formatted output records were created for the upload.

Each month the data collection time would increase as another month of data needed to be evaluated. "Our initial run of several years ago went from a couple of minutes to almost an hour for data collection," says Roth.

Solution – Fast, Flexible, Easy-to-Use Reporting Solution

Using Informer, data evaluation and collection went from nearly one hour to under a minute. Southeast was able to create one record with all the required data elements and then export to an Excel macro file for additional data manipulation. Much of this data manipulation can now be done using the 'Add Calculations' feature of Informer 4.0. "The whole process from start to upload is now just a few minutes compared to an hour previously," says Roth.

Results –Enhanced Reporting Capabilities Mean Huge Time Savings

Multiple files are accessed by Informer in this report and through links within many of their reports. "Moving data fields to a different order in the report are also a snap," says Roth. "Reporting capabilities are easy to use and the new 'Add Calculations' feature will deliver significant benefits."

What he loves most about the latest release of Informer, says Roth, are the added benefits of using SQL files for input and the ease of formatting the reports. "We have realized significant time savings", says Roth. "Selections run much quicker and the ability to manipulate the result view immediately after the report is executed is a huge win for our users. I believe they will appreciate the added control and flexibility."

For a demonstration of Informer Web Reporting or a free 30 day trial call us today at 888-703-0016 or email at sales@entrinsik.com. ■

IBM Sells U2 to Rocket Software

IBM has signed an agreement to sell the U2 assets to Rocket Software, a global software development company. Founded in 1990, Rocket is a provider of OEM software to IBM, HP, and other Fortune 500 companies. Rocket's R&D focus has the potential to accelerate the growth of U2's business.

"We see the acquisition of the U2 products by Rocket Software as a positive step for IBM's partners and users because of Rocket's deep expertise in database management software and Rocket's 20-year relationship as a trusted partner of IBM," said Susie Siegesmund, director, U2 Data Servers and Tools, IBM

"Rocket feels privileged to bring the U2 employees, products, partners, and customers onto our platform. We are excited to help you fulfill your business potential with the U2 product family, and to provide you the ability to get even more out of your U2 investment," said Andy Youniss, president, CEO, and co-founder of Rocket Software. ■

Expanding Northgate Team Gets Fuller

Northgate has again stepped up the rapid and successful expansion of its United States Reality team with the key appointment of technology director Mark Fuller.

Fuller arrived in California in September with an outstanding track record and more than two decades of high-level experience of developing and implementing the Reality MultiValue product.

The 40-year-old father of two, from the United Kingdom, will be running and building the technical and Customer Experience team for Reality, and is confident of continuing Northgate's impressive recent impact in this sector.

"I accepted the challenge of taking on this role because I

believe in what Northgate is accomplishing in North America," said Fuller. "With my technical knowledge and expertise we will deliver a quicker and greatly enhanced customer experience."

"We already have a substantial team of resources in place and are looking for significant growth to confirm ourselves as the leading player in this market. "

"It is an exciting time for the company and we have a tremendous platform to build upon over the coming years. I can't wait to show our clients the path to driving their businesses forwards and enhancing their profitability."

The success of Northgate's commercial team has made waves in the industry in recent months, with the acquisition of several key contracts.

Fuller, who joins the team as Director of Technology Reality USA, has a wealth of product experience and is also a leading voice on industry issues. He is determined to use his know-how and experience to provide the company with a significant competitive edge in this area.

"Businesses are looking to cut costs during these challenging financial times," said Fuller. "They are looking to make smarter investments in systems which show a genuine return. Reality delivers this.

"I will make a difference by further improving Reality's already impressive footprint in the MultiValue marketplace."

Fuller's appointment was given a resounding endorsement by Vice President, Reality, Mark Pick, whose leadership of Reality since his appointment last year has been credited with rejuvenating the product.

"I am delighted to welcome Mark to Northgate's USA operation," said Pick. "The company is in the midst of an exciting journey, with our Reality releases including many MultiValue flavor features that address our migration offerings.

"Mark's unique and diverse background, coupled with his deep MultiValue roots and reseller understanding, will be an invaluable asset in this long-term effort.

"There are common concerns in the marketplace at the moment. With our experience and technologies, we are the only realistic turning point for companies serious about addressing those concerns."

Northgate's continued investment in Reality is a reflection of management's belief that the product's cost-effectiveness, resilience, and integration and connectivity abilities make it the number one option on the market. ■

New Products

Racine Enterprises Inc. Releases the Building Blocks 4GL RAD Tools

Racine Enterprises Inc. (REI) is pleased to announce the release of its Building Blocks 4th Generation Language and Rapid Application Development Tools (BB4GL). Providing tools which will compete favorably with System Builder, the BB4GL contains tools which can transform terminals into GUI application clients complete with arrow keys, function keys (labeled and maintainable through a screen), quick screen repainting for thin-clients, advanced GUI field editing, GUI TCL Stacker, GUI spooler menus, sophisticated sGUI scrolling lookups, GUI version of the original MultiValue ED editor (without F-ing), and GUI Update processor.

The BB4GL also provides important database integrity tools which surpass those offered by Oracle, as well as database independence tools which support writing MultiValue source code which is largely MultiValue RDBMS independent. The BB4GL's Proc-to-Basic translator provides precise, compilable Basic source code for most procs, such that they work identically as before, but with GUI field editing at all prompts, optional immediate integration with MS Office, and optional scrolling lookups at desired prompts.

Yet powerful as these terminal-oriented tools are, the functionality of the BB4GL more than triples when AccuTerm is employed with the BB4GL. The BB4GL provides full integration with MS Office, including Word, Excel, and Access, from documents, to spoolers, to report writing, to stack editing, to TCL reports downloading. All of these not only download, but launch the application and automatically open the downloaded document, from the MultiValue application side, not the PC application side.

Five types of GUI menus are provided, all of which use the same text scripts. Options can be chosen by user. There is a sophisticated security system and there are GUI logons, too. Colors and PCL variables are provided to Basic, as well as some limited TCL column PCL using B/call/U correlatives. The BB4GL can be easily and efficiently integrated into existing source code to give a fresh Windows look and feel to legacy source code.

Available with limited source code, the BB4GL is priced at $2000 for unlimited use. Including full source code, the price is $5,000. REI has recently implemented the BB4GL on D3, mvBASE, and UniVision successfully and has immediate plans to implement it on OpenQM.

REI is committed to eventually implementing the BB4GL on all MultiValue platforms, since REI has 22 years of MultiValue experience including Mentor, UniVerse, UniData, Sequoia, AP, R83, and Ultimate. Using available documentation, REI has prepared the software to work on most MultiValue implementations already, using its library of database independence tools.

REI also provides technical writing as part of its service offerings and the BB4GL is professionally documented. The documentation is available online at www.racent.net.

REI also provides strategic planning, business and systems analysis, project management, custom software development, business and IT consulting, and MultiValue and MS Office training services. REI plans to offer other products such as its Purveyor Software (general purpose retail, wholesale distribution/supply, manufacturing, ERP/MRP, and accounting software), some inventions, and perhaps three other complete software packages in the years to come.

REI has partnered with Ramdata Systems Ltd. in the U.K. and both will provide support for the BB4GL product at prices consistent with customers' service needs. Ramdata employs the BB4GL in their Ramdata Optimum ERP application aimed at the car aftercare market.

REI is an authorized AccuTerm dealer and can offer reduced prices on AccuTerm software. Please contact John Racine at jpr@racent.net or Tim Bristow at bristowt@ramdata.co.uk for more information or to place an order. Please see www.racent.net for detailed product information. ■

Datatel Expands Its Enterprise CRM Solution with New Higher Education Recruitment Product

Datatel has strengthened its position in the higher education constituent relationship management (CRM) market with the introduction of Datatel Recruiter — the latest addition to the company's Enterprise CRM solution. Datatel Recruiter enables admissions office personnel to build strong and lasting relationships with prospective students throughout the admissions process and beyond.

"CRM is becoming an important strategic investment for higher education institutions," said Nicole Engelbert, Lead Analyst of Vertical Markets Technology at the Datamonitor Group, and author of the study, "CRM in the Higher Education Market."

"An enterprise-class CRM helps to bring together data from

three crucial areas: recruitment, retention, and development," continued Engelbert. "Right now, however, the economic downturn is prompting many institutions to focus CRM on recruitment activities in order to manage the influx of applications and to navigate uncertainty in admissions yield models more effectively."

Datatel's Enterprise CRM solution reaches beyond the realm of admissions and manages the complete student lifecycle — from suspect to alumni. With the addition of Datatel Recruiter, Datatel brings even greater CRM value and integration to the market.

Datatel's Enterprise CRM solution incorporates comprehensive consulting services and sophisticated tools that improve constituent satisfaction and productivity across all areas of the institution. This includes true integration with the database of record, reporting and analytics, and dynamic vertical workflows that supply the institution with a unique and powerful view of constituents, enabling admissions professionals to make smart decisions that lead to greater constituent satisfaction.

"Let's face it, great customer service doesn't stop once a student enrolls," said Datatel Chief Client Officer Liz Murphy when asked about Datatel's holistic CRM approach. "CRM is a strategy to improve customer satisfaction enterprise-wide. It starts the moment a student visits your web site and continues indefinitely. The more insight your institution has about its interactions with prospective students, parents, alumni, current students — really everyone — the better and stronger the ties will be, and the better the outcomes will be — top-quality enrollment, improved retention rates, increased donations, and overall greater satisfaction."

Datatel Recruiter supplies the admissions office with the information it needs to make smart decisions and stay on target to reach enrollment goals. Datatel Recruiter includes a complete 360-degree view of all interactions with prospective students; reporting and analytics; communications and event management; list segmentation and targeting; data integrity; and communication personalization.

About Datatel, Inc.

Datatel is the industry's most experienced provider of technology products, services, and insight to higher education. Colleges, universities, and technical schools across North America partner with Datatel to construct Strategic Academic Enterprises dedicated to achieving student success. The company has focused exclusively on higher education since 1979, and its technology is used by nearly 800 institutions serving more than five million students. For more information, visit www.datatel.com. ■

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installer isn't as flexible as the native installers mentioned here.

Step 3: Get UniObjects

The UniObjects connector is installed as part of the U2 Developers Kit (UniDK for short) and can be installed from your U2 client's installation media. If you're having problems locating your installation media, contact your vendor. Alternatively, you can download them from the new Rocket Software web site at rocketsoftware.com/u2/downloads/.

Also be sure to get the UniObjects Developers Guide documentation for your environment; you'll want to keep that reference handy. This can also be found on the Rocket web site with the other U2 manuals (intl-spectrum.com/s1027).

Step 4: Create the PHP-U2 connector

Figure 1 shows a few functions that can simplify the process of connecting to UniData or UniVerse. Assuming a stock Apache install, create this file as ConnectToU2.php in the C:\Apache Software Foundation\Apache 2.2\htdocs folder.

Looking at the code in figure 1, note the single ConnectToU2 function that is then used by the ConnectToUniVerse and ConnectToUniData functions. Because the same COM connector works for both databases, each of these smaller functions simply sets the appropriate database type (1=UniVerse, 2=UniData) and then calls the generic connector which returns a UniSession object (See the UniData Developers Guide for more information about this object.) You may not need both of these functions. If you're using UniData, feel free to ignore the ConnectToUniVerse function, and vice versa.

Say it with me: MultiValue everywhere... MultiValue everywhere... MultiValue EVERYWHERE!

Everything to follow — reading, writing, and so on — happens via the UniSession connector. And yes, each time this connector is called it'll consume a database license. Use the Disconnect() method of the UniSession object to make sure your licenses are properly released when you're done.

Step 5: Test the connection

Figure 2 shows a quick program to test the connection. You'll need to supply the appropriate parameters for the host, user, password, and account/path. If you have no particular preference for a name, place this in your htdocs folders alongside the other PHP code and call it testu2.php. With this code in place, open up a browser and browse to http://localhost/testu2.php. If all goes according to

```
<?php
function ConnectToU2($host, $user, $pw, $path, $type)
{
     $session = new COM("UniObjects.unioaifctrl");
     $session->HostName            = $host;
     $session->AccountPath  = $path;
     $session->UserName            = $user;
     $session->Password            = $pw;
     $session->DatabaseType = $type;
     $session->Connect();
     return($session);
}

function ConnectToUniverse($host, $user, $pw, $account)
{
     return(ConnectToU2($host, $user, $pw, $account, 1));
}

function ConnectToUnidata($host, $user, $pw, $path)
{
     return(ConnectToU2($host, $user, $pw, $path, 2));
}
?>
```

Fig. 1

```
<?php
include('ConnectToU2.php');
$session = ConnectToUnidata('localhost','user','password','c:/ibm/ud71/demo');

if($session->IsActive)
{
     echo 'Connection Successful!<br/><br/>';

     $session->Command->Text = 'COUNT VOC';
     $session->Command->Exec();
          echo $session->Command->Response;

     $session->Disconnect();
}
?>
```

Fig. 2

plan, you should see a message that says that the connection was successful followed by the number of items in your VOC file.

Step 6: Simplify!

Now that you have a working connection to your U2 database, the UniObjects connector has methods to open files, close files, read, write, and delete records, work with select lists, call subroutines, execute TCL commands —just about anything you can do with the database from BASIC can be done via UniObjects.

Be aware, just because it's possible doesn't mean it's going to be straightforward. In fact, some might even say the UniObjects syntax can be downright *wonky* at times. Take for example figure 3 which illustrates how to open a file and read a record from a UniData database. Extracting things from that record gets even more strange, as illustrated by the PHP loop shown in figure 4.

To simplify things, any time a UniObjects method returns a dynamic array, I use the code in figure 5 to convert the string to a first class PHP nested array. While this isn't exactly analogous to a

Continues on page 37

```
<?php
require_once('ConnectToU2.php');

$session = ConnectToUnidata('localhost','user','password','path');
if($session->IsActive)
{
    $file = $session->OpenFile('CUST.KK');
    if(!$file->Error)
    {
        $file->RecordId = '10';
        $file->Read();
        if(!$file->Error)
        {
            $record = $file->Record;
        }
    }
}
```

Fig. 3

```
$max = $record->Field(11)->Count;
for($ndx = 1 ; $ndx <= $max ; ++$ndx)
{
    echo $record->Value(11,$ndx)->TextValue;
}
```

Fig. 4

```
function parseRecord($dynArray)
{
  $result = explode(self::$session->FM,$dynArray);
  $amCount = count($result);
  for($amLoop = 0 ; $amLoop < $amCount ; ++$amLoop)
  {
      $attr = $result[$amLoop];
      if(strpos($attr,self::$session->VM))
      {
          $attr = explode(self::$session->VM,$attr);
          $vmCount = count($attr);
          for($vmLoop = 0 ; $vmLoop < $vmCount ; ++$vmLoop)
          {
              $value = $attr[$vmLoop];
              if(strpos($value,self::$session->SVM))
              {
                  $value = explode(self::$session->SVM,$value);
                  $attr[$vmLoop] = $value;
              }
          }
      }
      $result[$amLoop] = $attr;
  }

  return($result);
}
```

Fig. 5

SHORT-LINKS

What are those short links in the text of some articles?

As our authors share their knowledge and experience, they also point you to the Web for more info. Some of these URLs are long and cumbersome to use.

To make the URL easier to read and use, we are now using Short-Links to redirect you to the web page the author recommends.

The format (intl-spectrum.com/s9999) drops the "http://www." from the front.

Most modern browsers fill that in for you, or you can add it back in.

Comments or additional suggestions? Please drop us a note at editor@intl-spectrum.com

Report Mining

BY BRIAN LEACH

Today, more than ever, companies are looking to gain the maximum value from their IT assets. Vendors are seeking competitive advantages by making their products more appealing. And resources, both in financial and personnel terms, are in short supply.

Report Mining is one approach that lets you broaden the reach of your system by breathing new life into one of your most important assets — your existing reports.

Information provisioning and reporting are key drivers behind any successful application, especially as the application matures and becomes attuned to the needs of its users. And so, reporting capabilities, whether from listings or code, have always been a core feature of the MultiValue model. The ready availability of management information and the quality of the system-produced reports provide two golden opportunities for vendors to differentiate their products.

The problem is that all too often, these capabilities are devoid of presentation, and lock up critical information in formats that cannot be easily distributed and reused to best advantage. Green bar reporting, in particular, ages a system, however profound the content.

Report Mining is both a technique and a concept, changing the way you look at your current reports. By adopting the Report Mining mindset, reports are no longer viewed as an

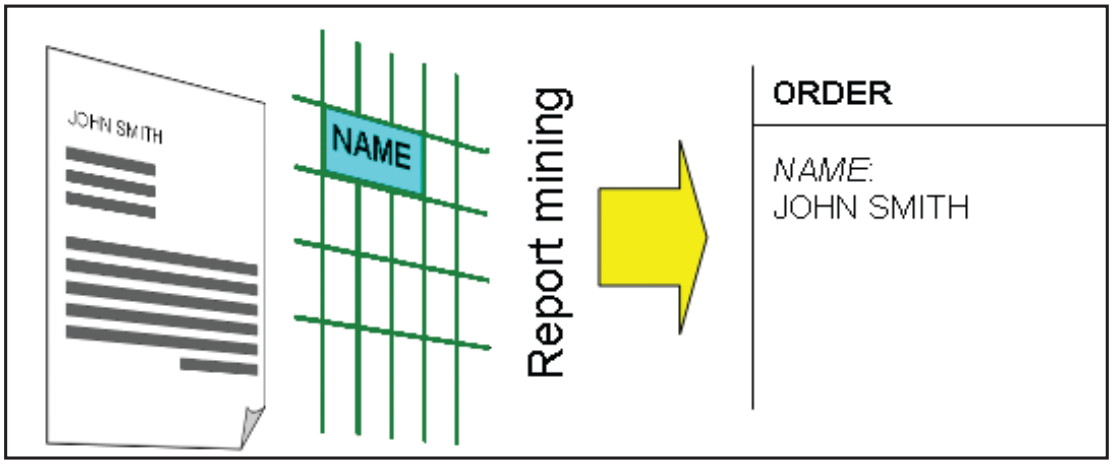

Fig. 1 Mining a Report using a Map

end point — the result of what may be a complex process to assemble, aggregate, and format information — but as a resource to be exploited to the full. For legacy systems in particular, this shift in approach offers a chance to turn those old reports into new, vibrant, and dynamic formats.

Report Mining solutions take existing reports, strip out the useful content from the report body, and turn it into new resources. In most cases, this means applying a map or template to the report that tells the mining software where to find the content, how to handle repeating columns of data and word-wrapped columns, how to match up header and detail information, and how encoded data should be enriched or reformatted.

Report mining solutions may be relatively simple or highly complex, ranging from parameterized substring extractions and fixed layouts to support for highly varied reports, using anchors and reporting zones to identify different report sections and applying post processing in various guises: enrichment, translation, reformatting, and/or restyling.

Even then, with the speed of modern systems, report mining is an activity that can take place on-stream, adding only a few seconds to the time taken to process a report. These solutions of course best suit old-style textual reports, which is the case for most reports generated from Basic or inquiry languages, since these reports can be more easily scanned and their content recognized.

By adopting the Report Mining mindset, reports are no longer viewed as an end point — the result of what may be a complex process to assemble, aggregate and format information — but as a resource to be exploited to the full.

So why add the overhead of Report Mining when you can simply modify your reports to support new formats and can export the data from source? Changing reports is both risky and time consuming, both for the developer and for the testing cycle, especially where regulatory requirements are in place.

The beauty of the Report Mining approach is that the originating code does not need to be touched. The new reports will need to pass inspection, but the full QA cycle is dramatically reduced, especially where the report has been produced as the result of a good deal of complex processing behind the scenes. Report Mining is a form of code reuse, only at an additional level of remove.

A single report may be mined for several different outputs, especially for vendor solutions that need to be adjusted to individual customer requirements.

Continues on page 33

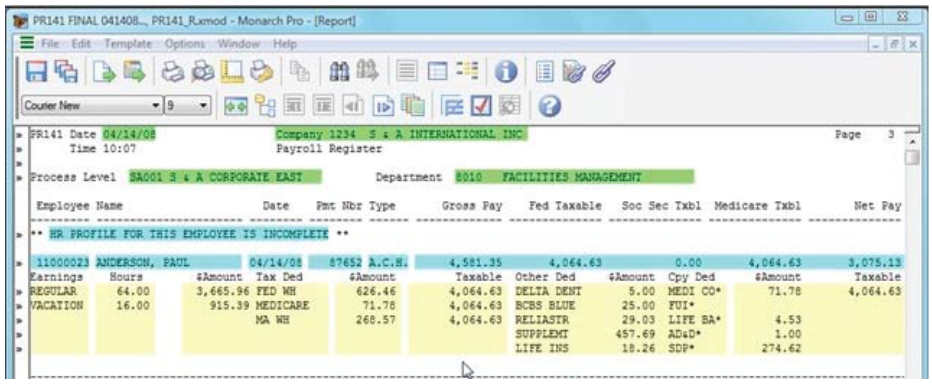

Fig. 2 Monarch popularized report mining on the desktop

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Consultants Needed Nationwide

Feedback

What came first, the letters or the letters-to-the-editor department?

We are making another change to International Spectrum Magazine — a Feedback Department, sometimes known as Letters to the Editor.

We want to hear your comments, your reactions, your agreement or disagreement with what you see. Also, do not hesitate to let us know about things happening in the MultiValue Community we may not have heard about yet.

Please send your comments by e-mail to:
editor@intl-spectrum.com

Purchase of IBM U2 by Rocket Software

BY NATHAN RECTOR

As you have likely heard by now, on October 1, 2009, Rocket Software purchased the U2 assets from IBM. Rocket Software has done a good job holding meetings with individuals as well as the MultiValue community regarding the purchase.

But there have been a lot of speculation and questions thrown around. This article summarizes many of those questions and the answers that Rocket Software has provided for them.

Q: ***What U2 products are moving to Rocket Software?***

All the U2 products will be transferring to Rocket Software: UniVerse, UniData, SB+, SB/XA, wIntegrate, U2.Net, Redback, Web/DE. COBOL Direct Connection, Dynamic Connection, UniObjects COM/.NET/JAVA, and the Client Packs found on the CD.

Q: ***What products will not be moving to Rocket Software?***

There are a couple of products that worked with U2 that will not be transferring to Rocket Software: DataStage, U2Stage, Cognos, and IBM.NET. IBM.NET was developed by IBM Information Services, and is owned by IBM. IBM will continue to provide that API. Rocket Software will be working on future joint agreements on how to maintain IBM.NET beyond the limited time frame of the existing agreement.

Q: ***Will IBM still sell U2 products?***

No. Rocket Software has not entered into any specific agreement for IBM to continue to sell U2 products. Rocket Software will be selling the U2 products through partner channels or through direct sales.

Q: ***Did Rocket Software purchase the assets only, or did they request all U2 employees as well?***

When Rocket Software acquired the U2 product, they specifically wanted the U2 engineers, support

staff, and management as well. Rocket Software prides itself on have the best engineers it can have, and values expertise of the people just as much as the products they acquire.

Q: ***Is U2 Lab Services going over to Rocket Software?***

Yes. U2 Lab Services is included in the acquisition. That is an area that they intend to grow as well.

Q: ***What do you think the biggest advantage to the user base will be?***

With the purchase, the U2 product will get additional resources that will increase product releases and functionality. Rocket Software purchased the U2 with the intention of growing the business.

Q: ***Will existing IBM U2 certifications still be valid?***

Yes, they will. The Certifications program will continue, as long as the U2 community finds it of value.

Q: ***What about 24x7x365 support for U2 products?***

Rocket Software has a world class 24x7x365 tech support. Many of Rocket Software's existing partners, including IBM, require that level of support.

Every year, they request their partners to grade Rocket Software's support on responsiveness. They score in the highest percentile every time.

Q: ***What did Rocket Software see in U2 to want to acquire it?***

Although this is only something you've heard about recently, U2 is something Rocket Software has been very interested in for over two years.

Rocket Software's database business has been primarily based around tools, and did not have a data server in its product portfolio. It was a gap that Rocket Software wanted to fill.

Rocket Software has always thought that U2 would be an excellent addition to their portfolio. It is strategic; it also fills a need. UniVerse and UniData do not overlap with anything they have, and it was a good strategic fit.

Rocket Software also wanted to make sure that when they filled the data server gap in their portfolio, they ended up with a good product and excellent engineers. Rocket Software wanted to make sure they got the people, not just the products, to help grow the business. UniVerse and UniData had all those things.

Q: ***Are there plans to consolidate UniVerse and UniData into a single product?***

No. Rocket Software does not prefer UniVerse over UniData, or UniData over UniVerse. Both are equally important, and both will continue to be enhanced and developed.

Improvement and enhancements will come in two ways. It will come from the U2 development team and come from other parts of Rocket Software. It will also come from request from the user and developer community.

Q: ***Will Rocket Software be interfacing U2 with other Rocket products?***

Yes, they have a very extensive BI portfolio. They are already planning on having these products interact with an interface to UniVerse and UniData.

Q: ***We chose to go with UniVerse/UniData because of the company that stood behind it and supported it (IBM). What reassurance can you offer to existing customers that they won't be left out in the cold when there are major issues with the product?***

Rocket Software has a 20 year track records as a software company. Rocket Software has never in its 20 year history walked away from a product.

The very first product the company built 20 years ago is not only still in the market, it is being run by more customers than ever before.

"Whether Rocket Software builds it, or acquires it, we stick with it, and we stand behind it. We offer you 24x7x365 tech support. We offer our customers everything from a Severity 1, Priority 1, down to Severity 4, Priority 4," says Andy Youniss CEO of Rocket Software.

Q: ***Why haven't I heard of Rocket Software before?***

"It is not Rocket's style to promote our corporate brand. We are much more

Continues on page 37

Tech Tips

BY CLIFTON OLIVER

Using SET.INDEX on UniVerse Files

Most people are aware that when you create indexes on a file in UniVerse, the index files are stored in a subdirectory in the same directory (account) as the file itself. For example, if your file is called CUST, all indexes would be stored in I_CUST. This has lead some to the assumption that the index subdirectory must always be in the same directory as the file. This is not correct, and assuming that has caused some problems.

Although the CREATE.INDEX command creates the I_ subdirectory in the same directory as the file, this is just a default. What you may not realize is that the pathname to the I_ directory is stored in the file header of the main file.

For example, if the CUST file is in /AR, it will have the path /AR/I_CUST stored in its header. If you move the I_CUST or both, it is up to you to change the path reference. This is accomplished using the SET.INDEX command.

Let's say you wanted to make a copy of the CUST file for testing purposes. Most likely you would go to the host OS command level and copy the raw file and I_ directory from there, especially if they are large. If you made a copy of CUST and I_CUST from the AR account to the AR.TEST account, you must LOGTO AR.TEST and then use the command SET.INDEX CUST TO /AR.TEST/I_CUST to adjust the path.

If you don't, when you change data in the AR.TEST CUST file, you will be updated the *LIVE* indexes in the AR account! This is a Bad Thing.

If you do not see an I_ directory for a file that you know has indexes, someone has probably moved it to another location for performance tuning. Use the command SET.INDEX CUST INFORM to see where it resides.

In these examples I used Unix-style path names. If you are running UniVerse on Windows, you would use Windows path names, of course. But the issues are exactly the same.

The TCL command HELP SET.INDEX will show you more options and examples. IS

Do you have a Tech Tip to share? E-mail it to editor@intl-spectrum.com

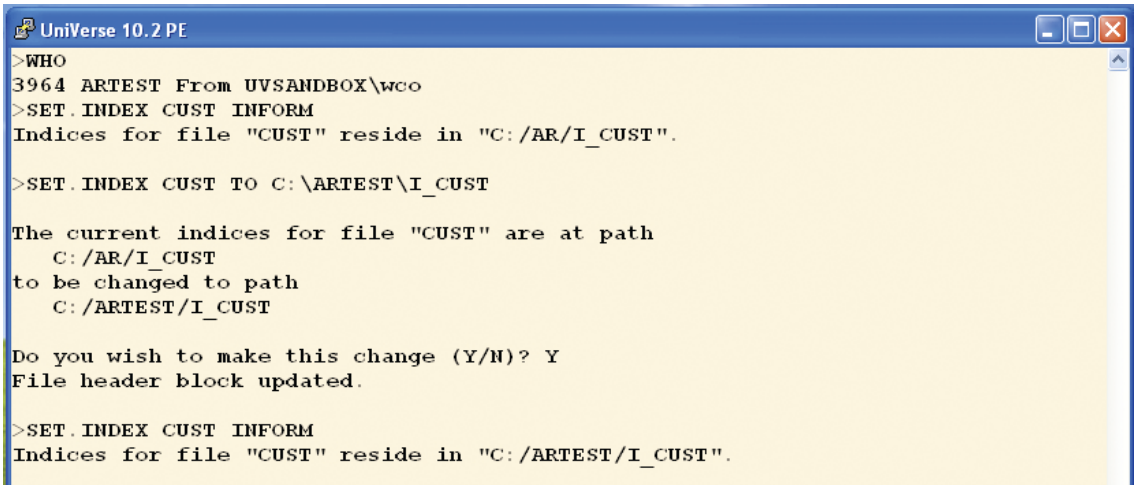

Fig. 1

REPORT MINING

Continued from page 29

Export invoices, delivery manifests, client statements and trading position summaries, currency and stock holdings, bills of materials — any report is a potential gold mine.

Report Mining is nothing new. The technique was popularized in the 1980s with the introduction of Monarch, a reporting solution from Datawatch. This enabled power users to unlock information derived from legacy systems, often systems with poor communications and poor support for standard data access protocols, by scanning generated reports and storing the data in tables to provide management information.

Away from the desktop, most, if not all, MultiValue databases allow reports to be captured in the spooler and post-processed using Basic. By treating these reports as text, developers can mine them for useful information and populate work files, generate spreadsheets, or build XML documents. Third party tools such as mvPDF provide graphical mapping tools to hot-spot report layouts, and support straight through Report Mining with the results passed directly into merge forms or report layouts to give a new or customized look and feel to old content.

So if your system produces critical but dated reports, look on these as a resource and not a burden. Report Mining solutions may be simple or advanced, commercial or in-house developed. But, whatever tools you use, they are a chance to reinvigorate an essential part of your applications. IS

BRIAN LEACH is an independent MultiValue consultant and Vice President of the U2 User Group. Find out more at: http://www.brianleach.co.uk.

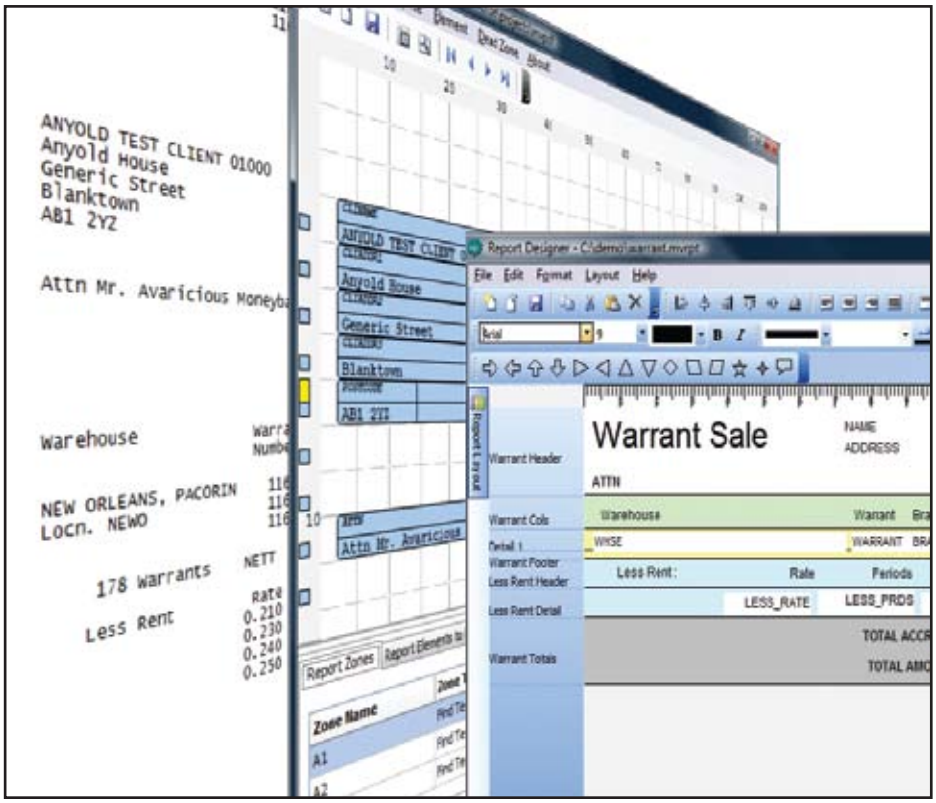

Fig. 3 mvPDF report mining and report restyling tools

MULTIVALUE INDUSTRY'S "END OF YEAR" RECAP

Continued from page 21

will emerge as a stronger company in the years to come.

Q: *What would you like Spectrum readers to watch for in 2010?*

At Revelation Software we are always in motion. Our 2010 Users Conference will be held at the Rio All-Suite Hotel and Casino in Las Vegas, Nevada. The conference dates are Tuesday, April 27 through Friday, April 30, 2010. We will introduce OpenInsight 9.2 at the conference.

OpenInsight 9.2 will include a web reporting tool and development toolkit called "O4W". The OpenInsight for Web (O4W) Development Toolkit makes it possible for OpenInsight developers with limited or no HTML, XML, or JavaScript experience to develop feature rich web pages. O4W is designed to work the way OpenInsight developers think, taking advantage of the skills and knowledge they already have. While users with more web development experience can use O4W's advanced features, all developers can create modern web applications (using Javascript, XHTML, and Ajax) through O4W's Form Builder, Report Builder, Menu Builder, and APIs. O4W will also be an entire browser-based front-end for OpenInsight database development. The O4W toolkit will run on IE8, Firefox, Safari, and Chrome browsers.

Rocket/U2

Q: *What new features or services did you introduce in 2009?*

UniVerse 10.3, released February 2009, included enhancements in Security (Automatic Data Encryption, Enhancements), UO.NET SSLStream (Interoperability/Connectivity, PAM / LDAP Support), Development (U2 Basic Developer Toolkit, UO.NET for Compact Framework), SOA (web services deployment, XML extended API, and encoding), and Consumability (file tools, backup tools, transaction logging).

IBM.NET V9.7, released in the fourth quarter of 2009, included enhancements in encryption, performance, EDM designer enhancements, and generate WPF/XAML apps.

U2.NET V1.2, released in July 2009, included enhancements in NLS, installation, and administration performance.

Web DE V4.4.2, released in June 2009, included enhancements in integration (SB/XA support, upgradeability, web and application server versions don't need to match).

wIntegrate V6.1.3, released in August 2009, included enhancements in interoperability (Excel 2003 Support, automation improvements, and IE8 certification), and supportability (improved diagnostics)

SB/XA, released in fourth quarter of 2009, included enhancements in Report Writer/QRD XPS output (.NET control, client output, client printing), multivalue grid and style support, dynamic styling, lookless controls v2, and improved readme and search tool.

Q: *What was the greatest or most exciting thing that happened to your company or product in 2009?*

The most important occurrence in 2009 was the acquisition of U2 by Rocket Software. Andy Youniss, president and CEO of Rocket Software said, "We are privileged to bring the U2 employees, products, partners, and customers onto our platform. We see this as a great opportunity to help grow the U2 product line and to expand its global reach. The acquisition is a natural fit for us — we have deep expertise in database management software and it strengthens our 15-year relationship with IBM. Our goal is to make this transfer of U2 assets from IBM to Rocket as seamless as possible for our partners and customers."

Q: *What would you like Spectrum readers to watch for in 2010?*

According to business unit executive, Susie Siegesmund, who now oversees the U2 business for Rocket, "the people with whom you have been working will continue to be your primary contacts, and the number you call for support remains the same. No pricing changes are planned, and — most importantly — the development team will remain focused on the existing product delivery schedule. We're very excited about our plans for future growth as a Rocket brand."

SJ+, Susan Joslyn

Q: *What new features or services did you introduce in 2009?*

The most visible changes to PRC these days are the revamp of the GUI in preparation for the conversion to XAML WPC / Presentation layer interface. It was a big year for changes in regulations, too — PCI, HIPAA's HITECH Act, and other outside-U. S. regulations have driven a number of changes. New reports (including Informer reports) and audit logs were built in this year. The slight slow-down in new installations afforded us the opportunity to upgrade most of our customers and to smarten up trickier situations, like sub-projects, parallel development, and risk/scope basis of projects; and to polish up trigger-based auditing. Our new slate of manuals was completed this year, as well.

Q: *What was the greatest or most exciting thing that happened to your company or product in 2009?*

We've had a lot of fun with social networking, this year. The amount of information we have found as a result of Twitter —following people and from the people who found or followed us — has opened up a lot of interesting material. There is an untapped wealth of potential in this sort of interaction! We've discovered much this year and plan to keep exploring.

Q: *What would you like Spectrum readers to watch for in 2010?*

This year the SJPlus.com web site will be revamped with 2.0 capability and will include a blog, interactive areas, and links to other social networking.

As always, watch for new compliance initiatives but more importantly watch for the opportunities to implement best-practices driven by those regulatory requirements.

Synergetic Data, John R. Wilson

Q: *What new features or services did you introduce in 2009?*

In 2009, we started offering Professional Services for system integration and implementation. And, we completed UnForm v8.0 and began beta release at end of October 2009.

Q: *What was the greatest or most exciting thing that happened to your company or product in 2009?*

The release of UnForm v8.0 with major feature enhancements in Document Archiving and Management and Document Imaging/Scanning.

Q: *What would you like Spectrum readers to watch for in 2010?*

The full release of UnForm v8.0 scheduled for December 2009.

Sysmark Information Systems, Inc., Dave Taylor

Q: *What new features or services did you introduce in 2009?*

SpoolerPlus, our generic Pick print spooler, was ported to the QM database to enable end users to reduce their annual operating expenses by converting their application software to QM without major modification. SpoolerPlus eliminates the expensive rewrite of print statements embedded in programs and procs, the revision of established operating procedures, and the re-training of user personnel related to enterprise-wide print processes and practices. SpoolerPlus now runs on UniVerse, UniData, and QM databases, on .nix and .doz operating systems.

An inventory subsystem was developed and added to customer software to facilitate tracking of product from retail units back to Country of Origin and Method of Processing to enable product recall in accordance with recently-established federal laws.

A Product Information subsystem was developed and added to customer software to update retailers' databases through the international Global Data Synchronization Network.

Q: *What was the greatest or most exciting thing that happened to your company or product in 2009?*

Ashwood Computer, Inc., Cincinnati, Ohio, was appointed an authorized reseller for SpoolerPlus. Ashwood Computer specializes in offering a migration path to legacy Pick database customers looking to upgrade or update their systems. By utilizing SpoolerPlus, their customers are able to protect their software investment and eliminate the need for costly end-user training.

Q: *What would you like Spectrum readers to watch for in 2010?*

Our FabMan Manufacturing and Distribution software product will be ported to QM. FabMan is appropriate for Build-to-Stock, Build-to-Order, Job Shop, and Machine Shop manufacturers and wholesale distributors.

Our EC/EDI*Wizard map-based EDI translator will be ported to QM. The Wizard can be installed as a standalone translator, integrated with our FabMan Manufacturing and Distribution software or integrated with a customer's legacy enterprise software.

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MULTIVALUE INDUSTRY'S "END OF YEAR" RECAP

Continued from page 35

TigerLogic

Q: ***What new features or services did you introduce in 2009?***

We are currently developing new major release versions of our D3 and mvBase products. These products will be in the beta cycle in 2009, followed by general availability in early 2010. Features include two new APIs — .NET API and Java API — built into the base D3 and mvBase products. The new APIs will provide enhanced connectivity and reduce dependency on secondary or third-party connectivity products.

In addition, we are introducing TigerLogic's XDMS technology into the MultiValue community. TigerLogic's XDMS technology provides enhanced support for multivalued data XML transformations, data integration, data caching, and multivalued database application access via web services.

Q: ***What was the greatest or most exciting thing that happened to your company or product in 2009?***

The company has a renewed focus on our MultiValue products and technology. This revitalization has lead to the development of our upcoming major release versions of D3 and mvBase, both upgrades provide customer-driven product enhancements into the MultiValue marketplace.

Q: ***What would you like Spectrum readers to watch for in 2010?***

Watch for the exciting new product releases of D3 9.0, mvBase 3.0, and our TigerLogic XDMS XML solution for the MultiValue community. These products will be followed by additional new product releases that continue to focus on the requirements of our customers. It is a very exciting time for TigerLogic, our partners and our MultiValue customers. IS

CLIF NOTES

Continued from page 38

tomer or vendor inquires. You can't do squat. For 15 hours. You might as well have stayed home.

And one of the latest goofs, gotchas, and gaffs that is sure to be remembered in the history of Cloud computing as an example of how to simultaneously tarnish your reputation and create a PR and legal nightmare in the process, we have the T-Mobile debacle. T-Mobile Sidekick users were informed that all of their contact, calendar, etc. data was "almost certainly" lost due to a server failure at the data center of Microsoft's subsidiary, Danger. (I'm not going there; that's way too easy. I do have some shame left.) The first question one has to ask is how any company storing customer's data about their work and life could not have backups?

A couple of days later, T-Mobile/Microsoft/Danger, whoever is behind these announcements, told users that most of the data would be recovered. This prompts the second question: how can a group of IT professionals not know that they had a backup and a way to recover from it?

And this, my friends, is my current concern with the state of cloud computing. Yes, I am also concerned over security, privacy, company longevity, and all of those. But the question that keeps scaring me is, "What kind of idiots are we turning our data over to?"

I learned this lesson the hard way. A domain hosting service I was using informed us that due to a hardware failure, we had lost several days worth of e-mail and any web site updates. In taking a more careful look, I discovered that their "real-time backup" claim was nothing more than SAN-based disk mirroring. They were claiming the mirror as their backup! When the entire SAN took a nose dive, obviously the backup, well, wasn't. So these days I do my own backups just like I did when I was running my own server. Lesson learned? Anybody can claim to be an IT professional.

I think that most shops have a fairly accurate, honest understanding of their strengths and weaknesses. There are, however, two extremes that I see way too often. On the one side are shops whose personnel think their by-products produce no odor, and nobody is as smart as they are. Well, their turn is coming. Pride goes before a fall.

The other side is a bit more common. A number of shops seem to have an inferiority complex. If a company is bigger, has more employees, performs data storage and access or applications a core business, well, they must be smarter, more knowledgeable, and experienced than us, right?

Well, when you, as I have, sit next to enough full-time system "administrators" who won't type the command you are telling them is needed to fix a problem but keep typing the same failing command over and over apparently expecting the computer to get tired, give up, and finally accept it, you might come to the same conclusion I have over the last three decades.

Size of company, number of IT employees, or number of said employees having some kind of vendor certification has *absolutely no* correlation to competence. So don't just turn your data, and the welfare of your company, over to some cloud computing outfit just because of cost analysis. Don't assume that since this is their full-time business they must be better at it than you and your staff are. Investigate. Find out the statistics. Insist on Service Level Agreements.

If you don't examine these issues carefully, you may be accidentally turning your data and processing — your company's lifeblood — over to a bunch of bozos. At that point, you've joined the ranks of those depending on Clown Computing. IS

MULTIVALUE EVERYWHERE — USING PHP TO CONNECT U2 TO THE WEB

Continued from page 27

dimensioned array, using the power of PHP arrays this conversion makes it significantly easier to access the information from the U2 record.

You may also have noticed that we'll need to call the ConnectToUniData or ConnectToUniVerse function on each page where we want the connection. This has the unwanted side effect of potentially storing authentication credentials in each page that connects to the database. To combat this, we can use a couple of other files as shown in figure 6 (ConnectToUniVerse.php) and figure 7 (ConnectToUniData.php).

With these files in place, we can get a connection to the database using a simple one line include() or require() in our PHP script. Of course, if you need to access more than one account you'll need a variation on this theme for each account. Just remember that the fewer places you store credentials the more secure your site will be and the easier it'll be to change later.

While UniObjects is a far from ideal connector for PHP, it does provide an easy way to get access to your U2 data and is far superior to some of the other connectivity options. With just a little bit of code there's no reason why our MultiValue information cannot be accessible via web browsers, smart phones, web kiosks, and other pervasive devices.

The dream is real and it's available today. So say it with me: MultiValue everywhere... MultiValue everywhere... Multivalue EVERYWHERE!

Note: This code illustrates using simple PHP to use the UniObjects connector but it is by no means the only option. PHP 5 has an excellent object model that allows a developer to create a class that wraps around UniObjects, simplifying the API and minimizing the number of individual scripts needed for harness all of that functionality. IS

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PURCHASE OF IBM U2 BY ROCKET SOFTWARE

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focused on brand identity for the businesses that we acquire. Many of you do not know Rocket, but do know BlueZone, Arkivio, Servergraph, LegaSuite, Seagull, Mainstar, ASTRAC, SmartDB, AeroText, and many other brands that we've acquired.

"Our strategy for U2 is to continue to promote that brand along with the UniVerse and UniData product names (don't read anything in to the order of those two names; I could have easily just typed UniData and UniVerse)," says Andy Youniss CEO of Rocket Software in an open letter to the U2 community.

"Some of you have already noted that Rocket has an OEM heritage. As a company who grew up on the software OEM model and continues to have a large, growing OEM business, we are very comfortable with Rocket being the brand behind the brand. We are here to make our partners as successful as possible with our technology."

Q: ***Where can I find out more about the U2 Purchase?***

There is an open letter to the U2 Community on Rocket Software's web site: www.rocketsoftware.com/u2 IS

```
<?php
require_once('ConnectToU2.php');
$session ConnectToUniverse('host','user','password','account');
?>
```

Fig. 6

```
<?php
require_once('ConnectToU2.php');
$session ConnectToUnidata('host','user','password','pathToAccount');
?>
```

Fig. 7

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(All questions must be answered. Incomplete forms will not be processed. Complimentary subscriptions are limited to U.S. addresses.)

1. What is your job function/title?

☐ Principal/Owner
☐ President/GM/CEO
☐ MIS/DP Manager
☐ Controller/Financial
☐ VP/Department Head
☐ Sales/Marketing
☐ Programmer/Analyst
☐ Purchasing
☐ Consultant
☐ Other

_____

2. Is your company a (check one):

☐ Computer System Supplier ☐ Dealer/OEM/VAR ☐ Software House
☐ Consultant ☐ End User ☐ Other _____

3. What MultiValue Databases does your company use? (check all that apply)

☐ D3 ☐ Native MultiValue ☐ Reality ☐ Other _____

☐ jBASE ☐ uniData ☐ UniVerse ☐ uniVision

5. What major business/industry most clearly describes your company?

☐ Accounting ☐ Medical ☐ Direct Marketing ☐ Legal
☐ Banking/Finance ☐ Dental ☐ Construction ☐ Retail
☐ Education ☐ Insurance ☐ Other _____

6. What are your firm's approximate gross annual sales?

☐ Under $500,000
☐ Over $1 million - $5 million
☐ Over $10 million - $25 million
☐ Over $100 million - $500 million
☐ $500,000 - $1 million
☐ Over $5 million - $10 million
☐ Over $25 million - $100 million
☐ Over $500 million

IS 03/08

CLIF NOTES

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Well, if it works for something like e-mail, what about complete applications? Enter another buzzword: SaaS (Software as a Service). One of the first and most successful SaaS companies is Salesforce.com. They provide a wide range of CRM solutions, and all you have to do is sign up. No servers to buy. No software to buy, write, or install. All you need is an Internet connection and a browser. (Well, and a checkbook.) They take care of application programming, data storage, backup, the whole mess. What's not to love?

Most of the appeal of the Cloud can be summed up in the phrase, "save a buck by passing the buck." But costs and (you think) responsibilities are not the only things you are passing to someone else. You are also passing control to outsiders. Control of your data, control of your security, and, to a certain degree, control of your company.

Whenever you see a cloud used in a computing illustration, it is invariably a pretty, white, fluffy thing. It invokes feelings and memories of idyllic days laying on one's back watching the clouds go by, not a care in the world. But people forget that sometimes a cloud can turn into a dark, towering cumulonimbus with hail the size of golf balls and turbulence that make 747s squeal and run for cover. And the Cloud is no different.

The first time Google's Gmail had a multi-hour outage, you would have thought the world was coming to an end, especially since it affected not only the free service but their paying customers. But now it has happened enough that it seems people are getting used to it.

Then there's an incident with Workday — a provider of SaaS-based financials, payroll, and HR applications. Imagine coming to work and finding that all of your financials are unavailable. You can't invoice. You can't answer cus-

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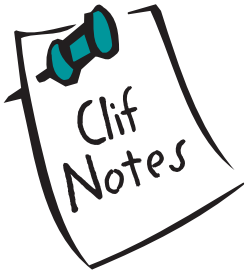
Is Your Head in the Cloud?

BY CLIFTON OLIVER



Cloud computing seems to be all the rage these days. If you read any of the trade papers and magazines, it is hard to find an issue that doesn't have some kind of article or story about it. It would appear that cloud computing is the newest Best Thing. As with most buzzwords, *cloud computing* is a term that can mean a lot of different things to different people. The ever present online encyclopedia of dubious accuracy, Wikipedia, which itself lives in the Cloud, defines it as:

> "…Internet ("cloud") based development and use of computer technology ("computing"). Conceptually it is a paradigm shift whereby details are abstracted from the users who no longer need knowledge of, expertise in, or control over the technology infrastructure "in the cloud" that supports them. Technically it typically involves the provision of dynamically scalable and often virtualized resources as a service over the Internet."

Ok. Right. So the Cloud is the Internet. Or a metaphor for the Internet. Or the stuff the Internet delivers. Or that you can access with the Internet. It can refer to data storage you rent, virtualized processors you pay for on a usage basis, applications you run, or any number of other things. In general, whatever you can do in your own data center — provide e-mail, edit and store documents, run a CRM or ERP application — you can do in the cloud. But why would you want to?

In a word, money — as in spending less of it. Let's take the simple example of e-mail. In today's environment, e-mail is necessary for almost all businesses. Maybe your lawn service can get by without it, but your hospital certainly can't. Want to run a deli? Depending on the size of your city and your location within it, chances are your customers expect to be able to place pickup orders by e-mail.

But to provide and maintain your own e-mail capabilities is a pain. You have to have a server. You need to understand and be able to install and configure the software. Then there's antivirus software to keep updated. Don't forget the spam filtering that requires periodic care and feeding. Oh, yeah, and the Internet connection and bandwidth.

Now imagine those problems, equipment costs, and labor scaled up to a company with hundreds of employees working from all over the globe. It kind of makes your head hurt. Oh, and now marketing wants to start e-mailing electronic newsletters to thousands of customers. Your e-mail needs fluctuate, but you have to buy the equipment and bandwidth to handle the highest loads even if those peaks only happen 10% of the time.

It's easy to see the appeal of just offloading that whole mess to an outside service. In addition to reducing your costs, you reduce your headaches. Now, if a vulnerability is found in the e-mail software, you don't have to schedule people to work a weekend to install the fix. That's somebody else's problem.

Continues on page 38

"The dashboard shows the top five troubled accounts and we have them (sales people) being active with turning those accounts around.

It's information that wouldn't be readily available without MITS."

Dan Hibbert, VP
Hibbert International

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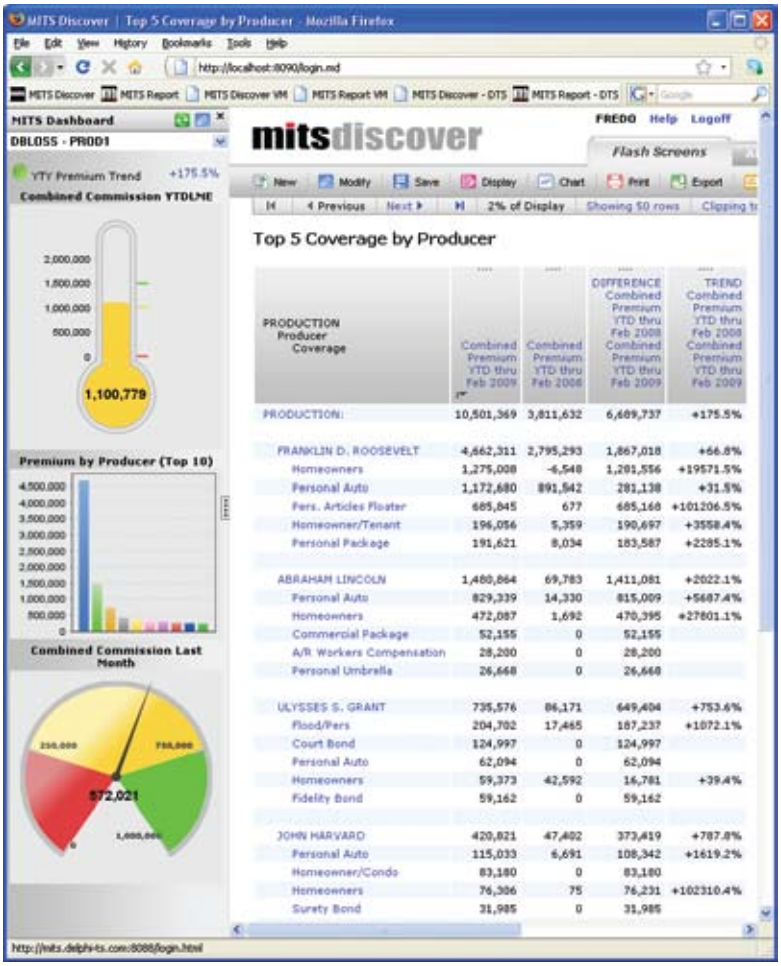

One thing is certain, success in business requires adaptation. New markets. New processes. New levels of demand for the products and services that your organization provides. The constant need to do more with less.

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