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# From the Inside

BY NATHAN RECTOR

<http://blog.intl-spectrum.com>

Are you silently adhering to the old-fashioned IT models to keep your enterprise running in the short term, or are you innovating your IT environment to help your enterprise in the long term.

In the Jan/Feb 2009 From the Inside, I talked about "innovate or die", and in the Mar/Apr 2009, I talked about how much the economy sucks and the opportunities that exist.

Recessions have a way of pushing for innovations within business and business practices. The old-fashioned, tried and true, models and methods aren't working as well now, so companies are starting to look for new ways to draw in customers and decrease expenses.

Businesses continue to struggle over getting the mid-market customer that had sustained them for the last several years. The CEO and CFO, as well as sales departments, are starting to look at the value market and the premium markets. Data, reporting, and accessibility to this information is key to finding these markets that the company had previously treated as the forgotten step child.

It may take some innovation to produce the data, or to provide the information needed to combine geographic location, sales data, and customer profiles.

If your CEO asked you how you can provide accessible data like this, or provide some other innovation, what type of idea will you deliver? Are you able to provide high-speed experiments, or will you have to tell your CEO it will take 18-24 months before you could do anything?

Do you know how to fully use all the tools you already have? Do you know what tools exist that would solve your problems or make your job easier?

Are you able to tap data from outside your enterprise to enhance the presentation, add accuracy, and provide more data? Are you able to provide outside systems easy access to the data you have accumulated over the last 30 years?

Web services, APIs, graphical reports, data accessibility tools, and mining and warehousing tools are important now, but what will your business ask of you next? Can you connect to Facebook, Twitter, or Windows Live and Sharepoint? Can Salesforce.com access your customer data information? What automation do you have within your systems? What automation is missing?

If you can't answer these questions, the International Spectrum 2010 conference is coming up April 12-15, 2010. You can get them answered there, as well as get the tools that will facilitate the innovation your CEO is going to require of you.

If you can't wait until then, take look at the webinars available, or talk with someone at your local user group or a consultant. There is a lot more you can do for your business's ROI than you may think.

**-NATHAN RECTOR**

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# INTERNATIONAL Spectrum

SEPTEMBER/OCTOBER 2009

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International Spectrum is published six (6) times per year at the subscription price of \$40.00 U.S. in the U.S.A.; \$45.00 U.S. in Canada and Mexico; \$50.00 U.S. for other countries. Single copy rates are \$7.00 U.S. in the U.S.A. and Canada, and \$9.00 U.S. in all other countries. International Spectrum is published by International Spectrum, Inc., 8956 Fox Drive #102, Thornton, CO 80260; Tel: 720/259-1356; Fax: 603/250-0664 E-Mail: [request@intl-spectrum.com](mailto:request@intl-spectrum.com). Copyright 2009 International Spectrum, Inc. All rights reserved. Reproduction in whole or in part, without written permission, is prohibited.

PRINTED IN USA

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# Preparing Your App for the iPhone

BY CEDRIC FONTAINE

**S**ince the launch of the iPhone in 2007, mobile browsing has exploded. The iPhone has succeeded where its competitors failed. But why? And can we easily develop our own mobile application for the iPhone?

In March 2009, the iPhone had 67% market share for mobile browsing with Safari. The other real mobile browsers — Opera Mini, Android (Google mobile), or Fennec (Firefox mobile) — are very far behind. As it often has, Apple brought a truly new experience for mobile browsing. Safari for the iPhone is a real browser and gives users the same experience as on any computer (except for Adobe Flash, which doesn't work on the iPhone).

Of course, the Blackberry is a popular phone, but it is mainly focused on *push* mail — your e-mail arrives on the Blackberry without needing to fetch it from your mail server. Browsing on

the Blackberry uses WAP, displaying very simple web pages, and is mainly focused on text or optimized images rather than rendering the true HTML pages. But now, things are different.

### Developing for iPhone

If you think, as I do, that your application should go mobile, you'll probably want to choose only one platform to develop on. (Unless you have the time and money to develop for more than one). C++ and MFC are for Windows Mobile, Java for Blackberry or Android (Google Mobile), and Objective-C for iPhone. The main focus of this article is the iPhone. So, here are some tips and hints to help you.

If you want to have your application running on the iPhone (or iPod Touch, which uses basically the same OS), you have two ways of doing it:

1. If you're taking the more complicated path and intend to develop proprietary code, you'll need to learn Objective-C, pay a fee to Apple to be a registered developer, and try to be approved in the App Store. But for each new iPhone OS (3.0 for now), you'll probably have to take time to update or improve your application, and test it on all the iPhone/iPod hardware. Objective-C is really a programming language, more complex than Basic, where you have to optimize your development and very precisely manage memory. If you're not already developing in languages like C++, Objective-C is not for you.
2. If you're going to develop a web application, of course you'll optimize your application for the iPhone.

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*The best way to start developing (or just optimizing) your application for the iPhone is to know your limitations.*

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But you'll be able to make it run on major browsers and different resolutions with just some minor headaches. One application, one language, unlimited platforms. The more interesting thing is that Safari (iPhone's web browser) is running on the Webkit/Core for page rendering, as does Android's browser. But keep in mind that in a web application, you don't have access to the hardware (like camera, touchscreen, barcode reader, etc).

*Continues on page 17*



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# Is PHP in Your Future?

BY KEVIN KING

**A**s MultiValue professionals, most of us are comfortable creating solutions using some variant of Basic. And why not? The various flavors of MultiValue Basic have more than enough abilities to handle the traditional day-to-day business needs. It's an easy language to write. It's easy to run. And, being baked into every MultiValue platform means it's right there whenever we need it. With extensive support for all sorts of processing and database manipulation, some might even question, "is there anything that our beloved Basic cannot do?"

And then we remember — the Web.

For all of its strengths and abilities, MultiValue Basic is still largely a telnet-based language. Certainly as MultiValue products have evolved, we now have interfaces (such as UniObjects) that allow Basic to be invoked via remote procedure call. But I believe the lion's share of Basic being written today is still being executed via some kind of telnet connection. Problem is, the web uses completely different protocols — HTTP and HTTPS — so if we have any desire to leverage our MultiValue data and technology in this web context, something is going to have to change.

There are numerous languages available for web programming in today's market. From Java to Ruby to Perl to Eiffel to... well, there are enough languages out in the wild to make things wholly confusing. With all of the different web-friendly languages, however, one language is notably missing: MultiValue Basic.

Without this, perhaps the next best thing for us is to find a language that's similarly easy to read, easy to write, easy to deploy, and has the ability to connect to a server to run our Basic code in one way or another. By this definition, I believe PHP may very well be the best choice of web-friendly languages for MultiValue professionals.



While the letters P-H-P are officially described today as meaning “PHP: Hypertext Processor”, a darker side of my personality tends to believe that at one time these letters may have meant “People Hate Perl”. Created in 1994 by Danish programmer, Rasmus Lerdorf, PHP is a scripting language originally created to replace a set of troublesome Perl scripts that were being used to manage Mr. Lerdorf’s personal web site. Since being released publically in 1995, the language has matured very well and rapidly and now boasts a robust object model, connectivity to numerous databases, and modules for everything from Apache integration to ZIP file manipulation.

Where PHP really shines, however, is in managing the minutiae of gathering input from a web browser presented through form submissions, cookies, and server variables. Figure 1 shows a simple HTML page that prompts for a couple of pieces of information to submit to a server. Figure 2 shows the PHP code needed to extract the information posted from that page.

While I expect nobody to have any problems understanding that dinky bit of code, let’s step back and look at this from a MultiValue perspective. In this small sample, when you see “echo” think “crt”. When you see `$_POST`, think of a MultiValue dynamic array where each attribute can be referenced by either name or number. Oh, and the dot just happens to be the PHP concatenation operator. Yes, the details are different but the principles should be familiar to anyone who has spent any time with MultiValue Basic.

Like MultiValue Basic, everything in PHP is a dynamic string until it’s converted or used in a non-string context. Both languages support everything a modern language needs (i.e., arrays, iteration, conditions, file I/O, etc.). Both languages support an extensive list of functions, opera-

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presented through form  
submissions, cookies, and  
server variables.*

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tors, and features for building complex expressions, converting values from one thing to another, and outputting results.

There are, of course, some notable differences: MultiValue Basic is compiled, PHP is interpreted. (Despite what might seem like an obvious performance concern, PHP code executes surprisingly fast.) There is also the obvious difference between working in a stateful en-

vironment with telnet versus a stateless environment with http(s). Believe it or not, this is another area where PHP really shines. With built-in state support, PHP can quickly save and restore a *lot* of information between transactions to keep a conversation going between the browser and the server.

The question remains, however: How do we get that web context to talk to the MultiValue context, or even to run our MultiValue Basic? The answer, unfortunately, is “it depends.”

With UniData and UniVerse, the UniObjects connector can be used (but only on Windows web servers) to connect to the back-end database. UniObjects allows records to be read and written directly from PHP and can even call U2 Basic, passing information both ways. Despite some wonky things about this interface and the fact that it’s platform dependent, UniObjects does provide an

*Continues on page 26*

```
<html>
<head>
  <title>Customer Name / Phone</title>
</head>
<body>
  <form action="showvalues.php" method="post">
    <table>
      <tr>
        <td>Customer Name</td>
        <td><input type="text" name="name" size="40"/></td>
      </tr>
      <tr>
        <td>Phone Number</td>
        <td><input type="text" name="phone" size="12"/></td>
      </tr>
      <tr>
        <td></td>
        <td><input type="submit"></td>
      </tr>
    </table>
  </form>
</body>
</html>
```

**Fig. 1**

```
<?php
echo 'Name = ' . $_POST['name'] . '<br/>';
echo 'Phone = ' . $_POST['phone'];
?>
```

**Fig. 2**

# IDEs and Editors: AccuTerm's WED

**P**ete Schellenbach, the president of AccuSoft Enterprises, is a very well known figure in our community. AccuTerm has been a staple for a lot of us. The WED editor, built into AccuTerm, qualifies for inclusion in this series, so we asked Pete in for a chat.

**SPECTRUM:** *What made you decided to create AccuTerm?*

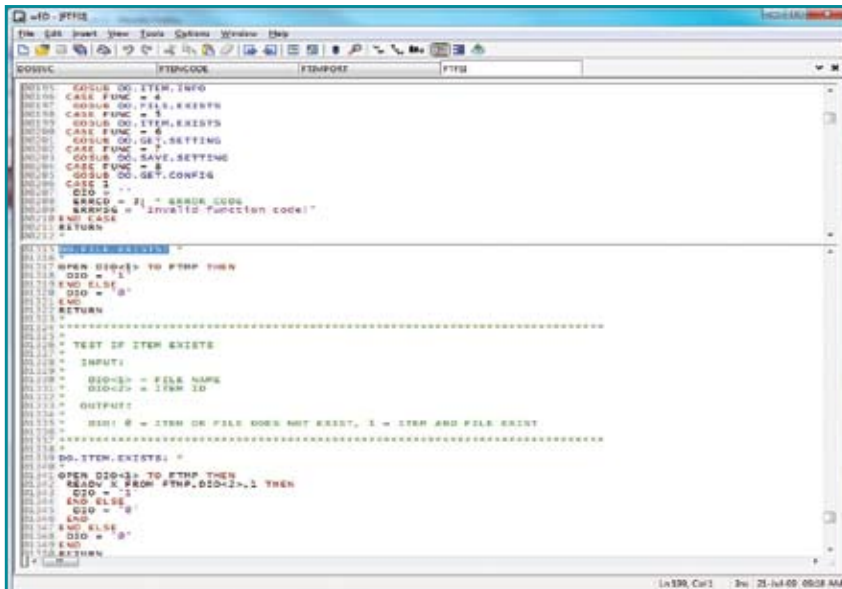
**SCHELLENBACH:** Our original software package targeted for the MultiValue market was AccuPlot, which was a business graphics package driven from the Access/English query language. We were doing quite well with the product, which produced printer output originally. We adapted the product to display charts on graphics terminals, which were quite sexy at the time but really expensive, \$5-10K. So in the late 80s, we decided to work on a graphics terminal software package that would run on cheap PCs. That was the beginning of AccuTerm.

**Spectrum:** *Who was the "we" back then?*

**SCHELLENBACH:** In the 80s, it was my brother, Mike, and myself. We collaborated with Joe Goldthwaite, an independent developer, for the initial design.

**SPECTRUM:** *When did WED tools start becoming part of the package?*

**SCHELLENBACH:** We started working on the GUI capabilities around 1999, and delivered the first version with AccuTerm 2000 (late 2000). WED was developed at the same time, as we needed good tools to create the MultiValue Basic programs necessary to interface with the GUI engine.



The idea for using color for syntax highlighting came from the style used by Microsoft's developer tools at the time — the Visual Basic and Visual C++ IDEs. Since AccuTerm was developed using these tools, adding color to the WED IDE seemed natural. The tricky part was the Basic language parser — identifying the syntactical elements correctly. In the early 80s, we sold a utility package

*Continues on page 12*



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## IDES AND EDITORS: ACCUTERM'S WED

Continued from page 10

for MultiValue that included a Basic formatter written in virtual assembler, so we had some experience in parsing Basic syntax. So, along with color to highlight language elements, WED also has a code formatter.

**SPECTRUM:** *And users are seeing an advantage from this?*

**SCHELLENBACH:** As far as other developers seeing any advantage in color syntax highlighting, yes! The original version of WED was only able to print in monochrome, and we got lots of early requests for color printing, so I guess it is a popular feature.

Additionally, they can have multiple items opened at the same time, search them, copy/paste between them, etc. Also, targets of CALL statements and INCLUDE statements are instantly opened by double-clicking.

*It supports most of the common GUI elements like labels, text boxes, list boxes, combo boxes, grids, check boxes, radio buttons, tabs, trees, menus and toolbars.*

**SPECTRUM:** *What about the GUI?*

**SCHELLENBACH:** AccuTerm GUI is a really robust GUI development environment for MultiValue developers. All coding is done in MultiValue Basic, making it a good fit for traditional MultiValue programmers. Feature-wise, it supports most of the common GUI elements like labels, text boxes, list boxes, combo boxes, grids, check boxes, radio buttons, tabs, trees, menus, and toolbars.

**SPECTRUM:** *What's the learning curve for the GUI?*

**SCHELLENBACH:** The GUI consists of 3 components: a library of Basic programs the developer uses to interface with the GUI runtime; the GUI runtime, which is part of the standard AccuTerm installation; and a designer which makes creating GUI forms a breeze.

I think most competent programmers can get a handle on creating simple GUI programs in a week or two, without formal training. We do have a tutorial on the web site that takes a couple of hours to go through. The tutorial goes through each of the steps to create a fairly common data entry program. For those programmers that have complex projects to do, there are some third-party trainers that give classes in AccuTerm GUI.

**SPECTRUM:** *What sort of real world uses? Who has it deployed?*



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**SCHELLENBACH:** There are some large applications running AccuTerm GUI now —medical, municipal government, distribution, service, etc. I don't have permission to name names, so I'd rather not.

**SPECTRUM:** *How do I deploy my application using your GUI? What are the costs and requirements?*

**SCHELLENBACH:** Deployment is automatic. Except for the cost of AccuTerm, there is no deployment cost. And, because AccuTerm GUI applications are host-based, there are no additional installation to deploy. As far as development costs, this is strictly the cost for your own developer's time; the development tools are bundled with AccuTerm.

**SPECTRUM:** *Host-based? So I don't have to update each user's*

*copy of the applications when I make changes?*

**SCHELLENBACH:** That's correct. Typically, you use the GUI designer to create a project which is saved back on the host system. This item is then used by your Basic program to create the GUI forms at runtime. This simplifies maintenance tasks because you do not need to install any updates on the client machines — just update your project using the designer, and (usually) update the Basic code that runs it. Nothing more.

**SPECTRUM:** *How can I get AccuTerm?*

**SCHELLENBACH:** AccuTerm is available from several MultiValue distributors — TigerLogic and EasyCo come to mind. It is available directly from AccuSoft and can be purchased online from our web site. We do have a 30 day evaluation version that you can download from the web site (asent.

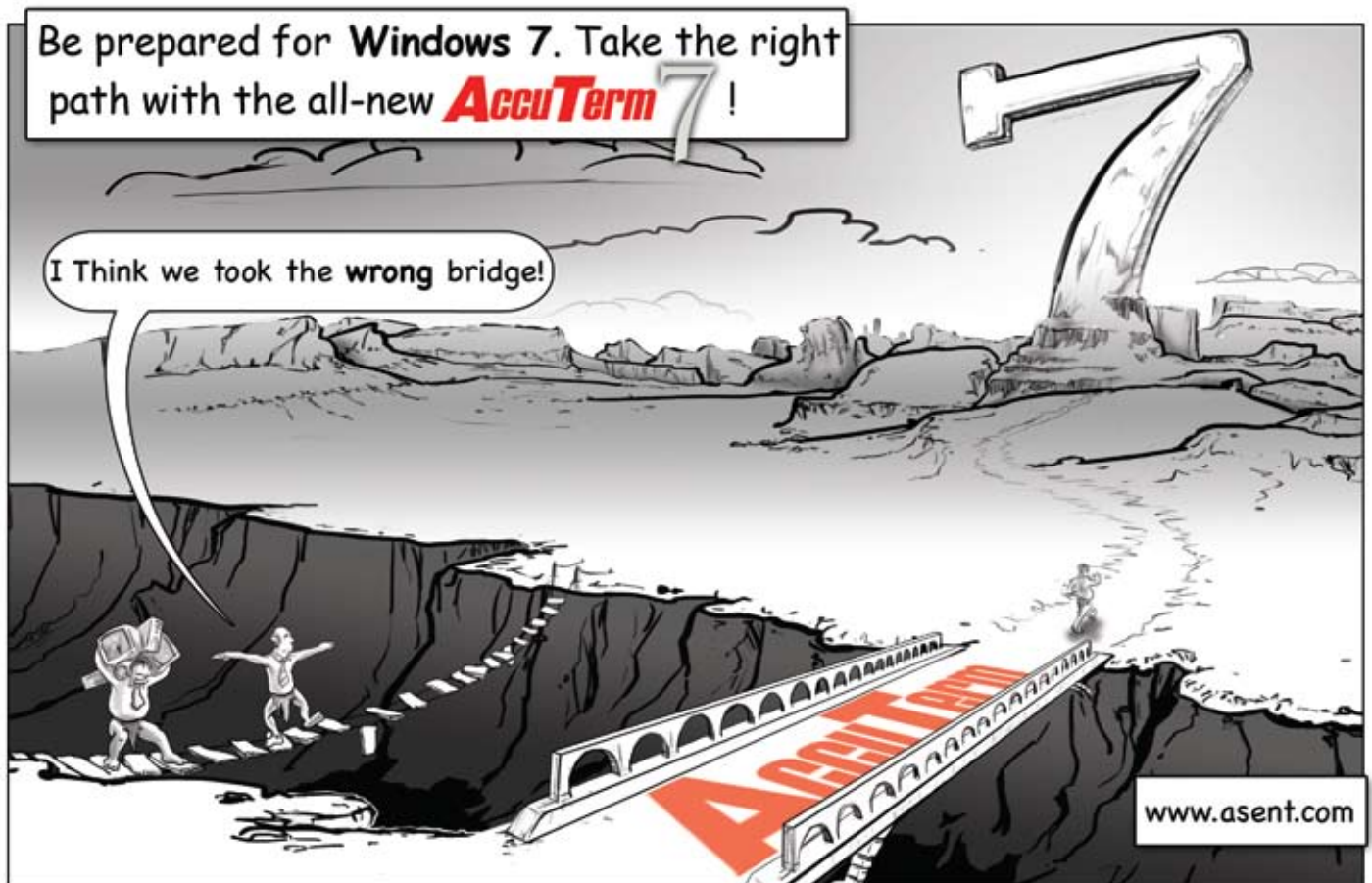
com). The evaluation version includes all of the development tools, including the GUI designer and the WED editor.

Also, there'll be a new version coming out later this year that has an updated look and feel, and will seamlessly blend in to the look and feel of the version of Windows being used. No changes required to GUI projects to take advantage of the updated look and feel. Upgrade costs depends on license — probably around \$60 for single user license and \$350 for small business license. **IS**

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# Best Practices VS YOUR Business Practices

B Y C A N D I H A R T

**W**hat are Best Practices and when is it appropriate to deviate from them?

*Best Practices* is a buzz word that is being thrown around in a lot of different contexts today, and it is touted as a good thing. A general definition of best practices might be “the process of developing and following a standard way of doing things.” Definitely a good thing in my opinion, but when it comes to business software or ERP packages, it often only means the most common procedures followed within an industry. In theory, the most common practices should also be the most efficient.

ERP software vendors market their packages by saying that their software follows best practices and therefore will need little or no modifications. The reality is that as a company begins implementation of a complete ERP package, they discover areas where their company just doesn't do things in the industry-accepted standard way. This realization sometimes results in the complete failure of the implementation. Most implementations include *some* modifications, and the ease of modification has been one of the biggest selling features of the MultiValue ERP packages.

The very feature that is a benefit when a company is buying an ERP software package can also hurt the organization if modifications are done without understanding the best practice, and considering the integrated nature of the software. I knew a general manager who suggested that the company purchase a new ERP package that was NOT easy to modify in order to establish and train his people to follow best practices. That company had grown rapidly, changed its business offerings, turned over personnel, and

their internal procedures had almost fallen apart. No one was left who understood the interrelated complexity of the ERP software or why it had been changed to do what it did, and the original software vendor was no longer available.

So what are some circumstances when it is feasible to modify the base package? My first recommendation, before you begin to modify a process, is to be sure that the change provides some company-wide benefit. Remember, ERP software provides a company-wide, integrated database! In general, modifications should save personnel time, reduce the number of people required to do a job, or give the company a competitive advantage.

Some of the most common reasons to modify an ERP package are:

1. To streamline or combine several steps because the company doesn't have a different department or employee to do each step, or because the company always does one step immediately after another.

2. If your company's practices are philosophically different than best practices. A good read is Eliyahu Glodratt's book, *The Goal*. In it, he questions many standard ways of accounting and measuring your success. You may not want to include direct labor into your job costs for instance, or you may need to modify the work order processes.
3. To add processes or integrate a database unique to your company that is not included in the original ERP package.

Let's take an example of a standard workflow or best practice and how your company may desire to modify that process. Then we'll ask what the best approach to that modification would be.

Large companies often have multiple warehouses, and moving product between these warehouses is commonly done via a material transfer. The material transfer provides a method to request and ship product from one warehouse to another, receive the product into the new warehouse, and get reports that indicate any product damaged or lost in transit. Standard accounting practices track product "in transit." Now, suppose your company is a mid-sized local company that has an overflow warehouse across town, and the warehouse manager periodically sends product back and forth to and from that warehouse using your own trucks. Following best practices, the base package probably contains the following steps:

1. Enter a material transfer.
2. Print a material transfer.
3. Ship a material transfer.
4. Print a report of material in transit.
5. Receive a material transfer.
6. Print a material transfer variance report.

This is a situation where your company doesn't require all these processes be-

## Having Rapid Access To Your Data Has Never Been More Important



**Why wait to employ the information necessary to react and respond to changing market conditions with confidence?**

The MITS product line contains two unique but complimentary web-based reporting solutions: The MITS Discover OLAP Business Intelligence System adds powerful data access and advanced analysis functionality to your existing MultiValue system and MITS Report, an ad hoc operational reporting solution optimized for sorting, filtering and summarizing MultiValue and Relational data.

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Advanced Reporting  
and Business Intelligence

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cause they don't have different people performing this function. There is never any variance because the warehouse manager enters the material transfer for the quantities he is sending over, and the time in transit is less than a day. He just wants to enter the parts and quantities one time, print a document, and have the computer move the quantities from one warehouse to the other.

If you don't modify your software, your options are to go through all these steps or handwrite a transfer form and enter inventory adjustments (a program also available in the ERP package). This would entail entering each part number and quantity twice — once subtracting the quantity from one warehouse and the second time to add the quantity into the other warehouse.

*Continues on page 29*

## 10 Years Strong & Growing

Integrity, Efficiency, Service,  
Guarantee, Global Productivity,  
Midwest Rates, Universe,  
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**Do you... have projects sitting on "the list" and not being completed?**

**Do you... just need some assistance from time to time?**

**Do you... want up-front, guaranteed estimates?**

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*"PICK Programmer's Shop has been outstanding to work with. They work with the highest integrity, are very responsive and quite knowledgeable. I can't imagine operating without them."*

*Patti Rowlette, Rowlette Executive Search*

***It's not just an anniversary. It's a guarantee.***

## CLIF NOTES

Continued from page 35

or professional use of the media, the question *What are you thinking, reading, and learning?* does.

Tell us what your business is working on. How's the new release coming? Have you added something to your product line? Did you find a good resource for avoiding Visual Basic pitfalls? Do you get value out of a certain user group or professional society?

Maybe this thing could be useful after all. I'm going to give it another try — carefully. You can follow @clifoliver if you want. I'm not making any promises except to (hopefully) not sound like a jerk. We'll see what happens.

Now, can anybody explain to me what the big deal is about this Facebook thing? **IS**

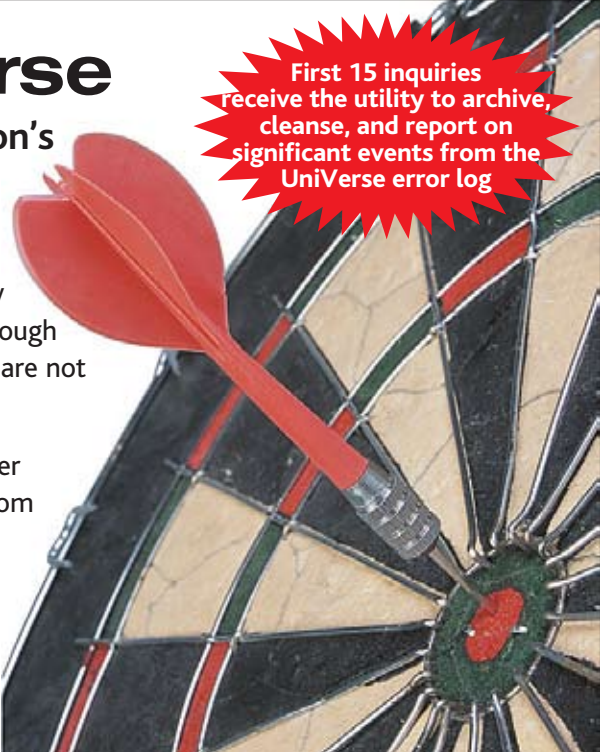
## Expand Your UniVerse

On-site training *targeted* to your organization's specific needs is now available.

Based on our popular UniVerse classroom courses, our on-site classes can be adjusted to fit your particular requirements. Why incur travel expenses for several people to go a class and sit through material about topics in which they already have experience or are not applicable to your environment?

You can increase productivity, reduce down-time, raise developer morale, cut operations and development costs, and get more from your UniVerse investment through our training in all aspects of the product and its use.

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First 15 inquiries receive the utility to archive, cleanse, and report on significant events from the UniVerse error log

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## PREPARING YOUR APP FOR THE IPHONE

Continued from page 7

### Know Your Limitations

The best way to start developing (or just optimizing) your application for the iPhone is to know your limitations. According to Apple, here are the limitations on the iPhone:

- 10MB max HTML size for web page
- JavaScript is limited to 5 seconds runtime
- JavaScript allocations are limited to 10MB
- 8 documents maximum can be loaded on the iPhone due to page view limitations
- QuickTime is used for audio and video

### iPhone Development Tips

Also, here are some good tips you can apply to your web application development. These are recommended by Apple, but they do really make sense for any web site viewed on small devices:

- Separate HTML and CSS.
- Use well structured and valid HTML (use the W3C Validator).
- Size images appropriately, depending on your target platform.
- Tile small images in backgrounds.

- Think about bandwidth when developing.
- For the iPhone, the stylesheet device width is 480 pixels.
- One column pages are preferred for the iPhone.
- Avoid framesets.

If you want to provide different widths depending on the screen size or hardware, you can try to detect the User-Agent (that is the ID sent by each platform's browser.) For the iPhone, the one you should look for is shown in figure 1.

You could also choose to use JavaScript to redirect to a different page. The code shown in figure 2 will redirect iPhone and iPod users to iPhone.html.

By the way, in the first half of 2009, YouTube saw a 1700% increase in video uploads from mobile phones. And in June, when the new iPhone 3GS came out, mobile uploads increased 400% a day during the first week. So, is video the next revolution? **IS**

CEDRIC FONTAINE is the founder and CEO of Nozumi Solutions. Nozumi Solutions is a subsidiary for North America of Easy Soft France, the company behind Winnix Software Emulator and various vertical software.

Cedric has been developing web applications with PHP since early 2000 and is a speaker in the PHP Québec conference.

Cedric can be reached by e-mail at [cedric.fontaine@nozumi.ca](mailto:cedric.fontaine@nozumi.ca)

## 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](mailto:editor@intl-spectrum.com)

```
Mozilla/5.0 (iPhone; U; CPU like Mac OS X; en) AppleWebKit/420+ (KHTML, like Gecko) Version/3.0 Mobile/1A543a Safari/419.3
```

Fig. 1

```
<script type="text/javascript">
<!--
var ln_urlref = document.referrer;
var browser=navigator.userAgent.toLowerCase();
if ((browser.indexOf('iphone')!=-1) || (browser.indexOf('ipod')!=-1))
    var users_browser=1;
else
    var users_browser=0;
if(users_browser && (ln_urlref.length==0) && curRubId==1 && typePage=='Rub') {
    document.location.href="iphone.html";
}
//-->
</script>
```

Fig. 2

# Business Tech: Becoming a Software Vendor

## Part 5

### Managing Price

Selling software requires a strategy. Your strategy will define your price. Maybe you'll sell through software stores, or directly, or by creating a sales channel — the options and variations could easily fill a bookshelf. We can't cover all of them, but we can talk in general terms about the repercussions.

When a book is published for \$20, the store and the distributor (collectively: the sales channel) generally keep half the money. That leaves \$10 for the publisher, the advertising, the overhead, and — oh, yes — the author. When you elect to sell through a sales channel, you have to have a price which makes it worth the channel's while to pursue sales. Direct sales give you the most flexibility on pricing. Of course, there's another pair of factors to consider in finding the pricing sweet spot: affordability and perception.

The first has everything to do with the economy and where your clients fit into it. You can't sell billion dollar packages to small business. The second has to do with price expectation. If I open a restaurant and sell steaks for \$2, people will wonder where I get my meat. Too cheap can actually be worse than too expensive. So, a good price relates to both the realities of the market and the unrealities of expectation.

Huge quantities of money were spent to determine that prices ending in ninety-nine cents do better in supermarkets and prices ending in nine tenths will be accepted at the pump. You, presumably, don't have huge quantities of money, so you'll need to find a more economical way to establish price.

One good rule of thumb is that it is easier to lower prices than to raise them. Erring on the side of too high — within limits — is better than erring on the side of too low. If you release at \$4,000 and then announce a price drop to \$3,500, that's a press release and fodder for a new ad. If you start at \$2,800 and go up to \$3,500, that's usually bad for business. The exception comes with major updates. If I raise my price when I introduce a raft of new features, that's a story most people will be willing to hear.

### Swimming the Channel

So, what price is your price? Let's consider channel sales. If a consulting project can be billed at \$800 a day, and a person can close a sale for a week's consulting work with less effort than they can close a sale on your product, then the cash incentive to sell your product needs to at least meet the cash incentive for selling time. Giving the channel four grand (\$800 times five days) means that you probably have to sell the product for eight to ten thousand. So unless your sweet spot is ten grand, you either need to make your product easier to sell, make sure that your product generates additional revenue for the channel, or look at alternatives ways to sell your product.

The channel doesn't just take a share of the money. They provide sales, marketing, and support. They help make your product *bigger* by expanding the number of people offering it, supporting it, and talking about it. In choosing to go direct, you inherit back all of that work. If you got six thousand from a channel sale, you cannot sell directly for six thousand

because you now have the expenses of direct sales.

### Brick and Click

Store sales — brick, online, and admixtures — are different. They don't care if your software sells; they care that the average shopper buys a certain amount of dollars worth of products. If your software helps that, you get shelf space. If a store sells no copies of QuickBooks, but having the Intuit banner attracts customers, they will stock QuickBooks. Obviously, you care about sales of your specific product.

So if your product is so un-project-like that it requires little or no training or explanation, this might be your route. Plan on having radically lower prices than previously discussed and plan on having more installation and new user questions. When I buy in a store, I expect an 800 number or a web site that is very newbie-oriented and helpful. Sometimes you have to let the users' expectation manage your choices.

### Direct To You

Direct sales puts all the work on the shoulders of your team. For many of us, your team is yourself and, perhaps, your significant other. If you have expertise in marketing, sales, product packaging, branding, and support, this is the way to go. Unfortunately, most of us will not be getting into the channel or into the stores, so direct becomes the option of (no) choice.

There are two theories in direct sales — there are millions — but we will address two — that you need to consider: (A) low volume, high interaction, like the channel, or (B) high volume, low interaction, like the store. Selling your enterprise resource management product (high interaction) to three customers might be enough to pay perpetually for a small staff and equipment, when you factor in consulting and training. Selling your file sizing tool (high volume) to fifty or sixty customers might

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*For seven thousand dollars, a nearly perfect demo is expected, and excellent customer service is the minimum requirement.*

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be enough to pay for your one-man-band for a year.

### Seventy Dollars

When you set a sales model, you have to set a price accordingly. When you set both a price and a sales model, you set a customer expectation. When I buy from a cashier, I have a different expectation on quality and service than when I buy from a certified salesperson and his team of pre-sales support engineers. So, you need to think about what sort of business you are comfortable managing.

I recently did an image management project for a client. To do one part, I needed to buy seventy dollars worth of new software from a one-man-band. The demo was on his web site and it only partially worked. I contacted the author, explained my issues, and — to my pleasant surprise — received a high level of customer service.

He got his seventy dollars. I got the full software in advance of payment so that I could confirm that it worked. I made the customer happy. Everything is good. However, if this was a seven thousand dollar purchase and the demo didn't work flawlessly, I would not have stopped to discuss it with the company. For seven grand, the attention to detail in the demo had better reflect the attention to detail in the product.

At his price point, a rough demo is expected. An excellent level of customer service, however, was a happy bonus and well above expectation. For seven thousand dollars, a nearly perfect demo is expected, and excellent customer service is the minimum requirement. For seventy thousand dollars — well, you do the math.

### Managing Software

When you make a project, you roll out changes as you make them. As you move from project to product, you have to do things differently. For example, I like Windows XP much better than Vista, so I did not upgrade. How are you, as the software company, going to support people who feel compelled to not take the upgrades? If they do take the update and it breaks, it might affect a dozen, a hundred, perhaps thousands of clients.

*Continues on page 27*



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# NEWSMAKERS



## Ashwood Computer Appointed SpoolerPlus VAR

Sysmark Information Systems, Inc. is pleased to announce that Ashwood Computer, Inc., specializing in MultiValue software conversions from legacy Pick databases to UniVerse and UniData, was appointed a Value Added Reseller for SpoolerPlus, the Pick print spooler for UniVerse and UniData.

SpoolerPlus provides the architecture and functionality of the print spooler on legacy Pick databases to users of UniVerse, UniData, and QM databases. This enables users of software converted from legacy Pick databases to UniVerse, UniData, and QM to continue to use the print queue architecture, spooler, and the print spooler commands embedded in their legacy Pick software or from TCL when they run their software on UniVerse, UniData, and QM without modifying their software, changing their business operating procedures, or retraining their personnel.

Commands like SP-ASSIGN, STARTPTR, LISTPEQS, LISTPTR, SP-EDIT, SP-STATUS, SP-KILL, and STARTSPOOLER work on UniVerse, UniData and QM like they do on legacy Pick databases. Print jobs and printers can be assigned to appropriate queues

to print selected print jobs on selected printers. Print jobs can be redirected to other queues and printers can be reassigned to other queues to match print job requirements with available printers at any moment in time. Multiple print jobs can be generated on separate queues to be printed on the same or different paper stock loaded on different printers to enable the printing of separate print jobs from the same program simultaneously. Print jobs can be printed only, placed on hold only, or printed and placed on hold at the same time for future review and/or re-printing.

The spooling program runs as a phantom and can be scheduled to rerun as often a desired — e.g., every second, two seconds, three seconds, etc.

Special features added to SpoolerPlus that are not part of the legacy Pick print spooler include the ability to define the print characteristics of any queue and then reconfigure the printer being assigned to that queue automatically in accordance with those print characteristics.

In addition, users can scroll up, down, and to any specified line number in the list of print jobs on hold rather than starting over from the top and viewing the list only once, sequentially, until reaching the bottom.

And, to meet the needs of those customers whose software was originally developed on the Reality database, the Reality syntax for commands like SP-ASSIGN, SP-EDIT and SP-KILL has been added to SpoolerPlus to make it

more compatible with the Reality print spooler.

SpoolerPlus has saved its customers thousands of dollars in software modifications and hundreds of hours in changing operating procedures and retraining personnel.

### About Ashwood Computer

Ashwood Computer, Inc. specializes in offering a migration path to legacy Pick database customers looking to upgrade or update their systems. Partnering with industry leaders, Ashwood provides a Total Integrated Solution. New technology within the IBM, Sun, and HP markets provides the stable hardware environment. By utilizing SpoolerPlus with UniVerse or UniData, their customers are able to protect their software investment and eliminate the need for costly end-user retraining.

For more information, please visit Ashwood Computer at [www.ashwoodcomputer.com](http://www.ashwoodcomputer.com) or call 513-563-2800 or Sysmark Information Systems at [www.sysmarkinfo.com](http://www.sysmarkinfo.com) or call 800-SYSMARK (800-797-6275).

### About Sysmark Information Systems

Sysmark Information Systems, Inc. specializes in ERP software for manufacturers and distributors; EDI Translation software for VICS Retail, UCC Grocery and other industry sectors; Global Data Synchronization, Print Management Systems for UniVerse, UniData, and QM databases and custom software consulting and development. ■



## Entrinsik appoints Chris Reeves as Director of Channel Partnerships

Entrinsik, Inc., a leading provider of innovative, web-based operational reporting and analysis solutions, announced the appointment of Chris Reeves to Director of Channel Partnerships. Entrinsik partners with a number of value added resellers, systems integrators, and consultants in various industries to deliver Informer Web Reporting, a powerful and popular web-based reporting solution.

With over 11 years of marketing, product development, and business development experience in the technology industry, Mr. Reeves has a proven track record of success in helping solution providers grow their business by integrating complementary products to deliver a comprehensive solution.

"I look forward to building on our success in developing Partner relationships", says Mr. Reeves. "Our latest release is generating significant interest, and as our market grows to include both SQL and MultiValue solution providers, now's the time to further develop our channel program to help our Partners respond to the increasing demand for real-time operational reporting."

The release of Informer v4.0 delivers easy and controlled access to information from multiple systems, platforms, or locations eliminating data silo constraints with or without a data warehouse. Mr. Reeves will oversee the company's overall channel sales and marketing initiatives to further increase visibility among solution providers and support the success of partner companies.

"Chris' appointment represents another important step in supporting Entrinsik's growing business," says Doug Leupen, CEO and President at Entrinsik. "Solution providers who specialize in helping small and mid-size companies will clearly be attracted to Informer's Partner program opportunities to achieve greater market exposure and expanded business and revenue opportunities."

Entrinsik has grown significantly over the past several years, and now has nearly 700 customers, 15 partners, and thousands of users around the world. For more information on Entrinsik's Informer Partnership program, please visit [www.entrinsik.com/informer](http://www.entrinsik.com/informer). ■



## Hudson County Community College Opts for Datatel Colleague Software

Datatel, Inc. has announced that Hudson County Community College (HCCC) has selected

Datatel Colleague SQL Server to provide an end-to-end solution that manages its complete student lifecycle. The software will enable HCCC to build a Strategic Academic Enterprise that drives student achievement and institutional success. Colleague will replace an IA Plus software system from SunGard Higher Education.

A core component of the new system, Datatel's e-Marketing software will allow HCCC to more easily and effectively administer its strategic enrollment management process — from prospect identification and recruitment, through alumni relationship development.

"This new system will provide a single, seamless, integrated information system that will enhance productivity, streamline processes and costs, and adapt flexibly as the College grows," said HCCC Board of Trustees Chair William J. Netchert.

By streamlining departmental processes and enabling the entire institution to function as a fully integrated enterprise, Datatel will help improve operations and communications in finance and human resources, and throughout the student lifecycle. Institutional decision making will be enhanced with the Datatel Reporting and Analytics solution suite that incorporates Business Objects Crystal Enterprise XI and FRx Software for real-time reporting.

To expedite the implementation of its new Colleague system, HCCC chose Datatel's ExpressWay service — a unique approach that reduces the time and resources required to implement a comprehensive enterprise-wide solution, improving institutional effectiveness.

Datatel's Strategic Academic Enterprise is a holistic approach that focuses on and supports five cross-functional domains that are essential for achieving institutional and student success: Strategic Enrollment Management, Strategic Planning, Institutional Advancement and Marketing, Teaching and Learning, and Performance and Operational Management. The Strategic Academic Enterprise extends traditional enterprise resource planning (ERP) models by viewing administrative and academic functions as vital interdependent business processes across the higher education environment.

### 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 1968, and its technology is used by nearly 800 institutions serving more than five million students. For more information, visit [www.datatel.com](http://www.datatel.com). ■



## Zumasys Named 143rd Fastest Growing Business in United States

Inc. Magazine ranked Zumasys No. 143 on its 28th annual Inc.

500 list, an exclusive ranking of the nation's fastest growing privately held companies. Orange County based Zumasys generated revenues of \$11.7 million and had an impressive three-year growth rate of 1,234%. Notable companies such as Microsoft, Zappos, Intuit, and Oracle gained early exposure as members of the Inc. 500.

"If you want to know which companies are going to change the world, look at the Inc. 500," said Inc. editor Jane Berentson. "These are the most dynamic, fast-growth companies in the nation, the ones finding innovative solutions to problems, creating smart systems, and inventing products we soon discover we can't live without. The Inc. 500 list is Inc. Magazine's tribute to American business ingenuity and ambition."

Based in Irvine, California, Zumasys provides enterprise-class infrastructure and application hosting solutions to small and medium businesses across North America. Customers are able to better meet their disaster recovery, business continuity, and mobile computing objectives by leveraging Zumasys' broad experience with emerging technologies such as Virtual Desktop Infrastructure (VDI), VoIP, and Gobi Mobile Internet. While Zumasys serves large customers such as American Express, Bebe Stores, and MeadWestvaco, it specializes in serving more than 2,000 small and medium businesses that span industries including agriculture, distribution, non-profit, and manufacturing.

Founded in September 2000, Zumasys refocused its business on application hosting nearly four years ago, which greatly accelerated the company's growth.

*Continues on page 25*

# New Products



## SDSI Announces UnForm Version 8.0 Beta Release

Synergetic Data Systems, Inc. (SDSI) has announced October 2009 as the planned beta release date for UnForm version 8.0, the latest release of its popular smart laser forms and document management software tool.

UnForm is a platform-independent, client-server software tool for UNIX, Linux, and Windows. It allows value-added-resellers, software developers and integrators to incorporate advanced forms and document management features into existing mainline business software applications without programming or modifications to existing software code.

"The release of version 8.0 continues to solidify UnForm in the category of a full-fledged document management solution," states John R. Wilson, SDSI's director of sales and marketing. "The optional document archiving and image management/scanning components that seamlessly integrate with the base UnForm feature-set, provides our customers with the ability to leverage their investment in forms enhancement and document delivery technology to take further advantage of the efficiencies gained from electronic processing and man-

agement of key business documents."

In addition to the complete redesign of the browser-based document archive retrieval interface, the image manager/scanning component has been significantly upgraded to support full text OCR recognition. UnForm version 8.0 also has many other new features and enhancements to the base software to increase its functionality and usefulness. Key features include:

- dynamic document creation for laser print, PDF for e-mail, and output via fax servers;
- new XML parsing of print-stream data;
- new Object oriented coding techniques, with built-in objects for complex documents;
- print-stream page array handling functions that simplify smart-form processing;
- e-mailing using SMTPS, a secure version of SMTP supported by many e-mail servers, such as Google's gmail.com service;
- new Deliver command for simplified and automated electronic document delivery – includes delivery database for e-mail addresses and fax numbers;
- PostScript and PCL5 printer compatibility;
- new enhanced soft font support with TrueType font capabilities;
- new multibyte character set support for international customers;

- new 2D bar code support for Zebra label printers;
- Windows Support Server component for enhanced platform inter-operability, such as graphic image conversion, access to the free MSFAX faxing engine, and ODBC connectivity support.

SDSI markets UnForm and other software tools through an international network of resellers, developers, and integrators. Other SDSI products include the General report writer, sd-Office, dServe, and MAILCALL. Visit SDSI's web site at [www.uniform.com](http://www.uniform.com) for more information about UnForm, other SDSI products, and marketing programs.

Contact:

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Fax: 530/672-9975

E-mail: [johnw@synergetic-data.com](mailto:johnw@synergetic-data.com) or [sales@synergetic-data.com](mailto:sales@synergetic-data.com)

Web site: [www.uniform.com](http://www.uniform.com) ■



## Kourier Integrator for U2 - Release 2.2.1 Available

Kourier Integrator for U2 Release 2.2.1 is now available from Kore Technologies. Kourier Integrator for U2 is Kore's enterprise integration suite which provides Extract, Transform,

and Load (ETL) and Enterprise Application Integration (EAI) capabilities for connecting IBM U2 applications to Microsoft SQL Server and other best-in-class applications.

The new release of Kourier Integrator for U2 focuses on providing end-user productivity enhancements, system performance, and user-requested features.

Here are just a few of the new improvements available in Release 2.2.1:

- Related Files feature makes it easy to extract data from multiple U2 files sharing the same data structure.
- New Socket Interface available for integrating with external applications.
- SSIS Package generation option to truncate table on full refresh, boosting data loading performance.
- Improved SISS package run-time error diagnosis by associating SQL column names with errors whenever possible.
- SQL Accelerator improved for faster and easier to generation of multiple SSIS packages.
- Improved performance of user interface when managing and viewing large amounts of data.
- Many user-requested productivity improvements to the Quick Start tools.

The most significant new feature in the new release is the Related Files feature. This is a major productivity enhancement when extracting data from applica-

tions that use files which share the same data structure for multiple files (e.g., comma files or segmented transactional files by year). With the Related Files feature you can easily combine information from many related data files into one Microsoft SQL Server table for ease of reporting using just one export specification, saving you time setting up and maintaining your data exports.

Release 2.2.1 of Kourier Integrator for U2 is available now. If you would like more information regarding the Kourier Integrator for U2 solution and how it can help you integrate your MultiValue application with Microsoft SQL Server or other databases, please contact your Kore Technologies representative, call Kore at 866-763-5673 or send an e-mail to sales@koretech.com. ■



## **BlueFinity's mv.NET with Solution Objects Heralds a New Era in .NET Application Development for MultiValue Databases**

BlueFinity International, a member of the Mpower1 Group of Companies, announces the latest enhancement to its .NET development toolset for MultiValue databases: mv.NET with Solution Objects.

mv.NET provides a 100% native .NET interface to all major MultiValue databases, allowing .NET developers to access all aspects of their MultiValue systems. The new Solution Objects component set for mv.NET builds upon this existing infrastructure to provide strongly-typed, class-based access to MultiValue databases via the generation of an advanced data abstraction layer.

Solution Objects adds extra design-time functionality to the existing mv.NET Data Manager utility, including an entity designer, a data mapping tool, and a code generator. The generated code then utilizes new run-time support libraries to provide full data persistence support for .NET applications.

The design-time tools allow the developer to define how their MultiValue data structures map to a class-based representation of the application's data domain. The code generator takes these entity definitions and generates both Data Access Layer (DAL) and (multiple) Business Access Layer (BAL) code modules in either C# or VB.NET.

The DAL holds a complete definition of the entity-to-database mapping scheme. The developer is able to define the existence and content of application "entities" using existing dictionary definitions as a starting point if required. The entity modeling tool allows the developer to define many advanced pieces of data shape and relationship information and is fully nested-data (multi/subvalue) aware.

Each Business Access Layer (BAL) exposes a sub-set of the data access supported by the underlying DAL. The purpose of the BAL is to provide customized "views" of the same under-

lying entities in order to impose a simplified or tighter level of security layer for different groups of developers, allowing greater control over data exposure and manipulation.

The Data Manager's code generator automatically adds all required interface implementation and class decoration code into the generated BAL in order to support standard .NET data binding for both Web and rich-client applications. This also means that all classes within a BAL can be used as a standard Visual Studio object data source providing any third party .NET tool or component with full read/write access to the underlying MultiValue database. Code generated by the Data Manager also includes XML-based online intelligence help.

Within Solution Objects, support for multiple data sources within a single BAL will be added. This will allow access to a variety of different back-end data stores (including SQL databases) to be consolidated into a single access layer.

"Solution Objects will revolutionize the way in which you access and manipulate your MultiValue data from within Visual Studio," says David Cooper, Lead Developer at BlueFinity International. "It provides easy to use database access for developers who don't have detailed knowledge of MultiValue database technology or even databases in general. Also, it encourages developers to produce more intuitive, readable code resulting in much faster, more effective application development. With .NET set to dominate the application development space, mv.NET with Solution Objects sets a new benchmark for mainstream developer usage of MultiValue databases."

The Beta program for mv.NET with Solution Objects is now concluding and the general release will be available in October. For more information, email sales@bluefinity.com or visit www.bluefinity.com to download the free white paper.

### **About BlueFinity International**

BlueFinity International (www.bluefinity.com), part of the Mpower1 group of companies, supplies leading-edge software development tools and consultancy services to the MultiValue database and Microsoft developer communities. Founded in 2002, BlueFinity has created a series of products. Its flagship product mv.NET is a comprehensive solution for developers wishing to access MultiValue databases from within Microsoft's .NET environment. ■



## **InterSystems Delivers New Features For CACHÉ High-Performance Object Database**

InterSystems Corporation introduced innovative technology additions to its InterSystems CACHÉ high-performance object database. Available now, the new features provide enhanced reporting, web services security, and system management and monitoring.

"Delivering these capabilities illustrates our commitment to responding to the requests of

*Continues on page 24*

## New Products

Continued from page 23

our global customer base for the features they currently rate as most wanted and needed for their overall success," said Robert Nagle, InterSystems Vice President of Software Development.

InterSystems develops innovative database, integration, and business intelligence products. Known worldwide as a highly scalable object database for transactional systems, CACHÉ handles SQL queries faster than relational databases and enables rapid Web application development.

### Delivering Next-Level Capabilities

Major enhancements to CACHÉ include:

- **Built-in Reporting**—New Zen reports built into CACHÉ completely eliminate reliance on external reporting tools. Developers have easy access to advanced reporting capabilities and IT departments realize significant cost savings. Reports can be generated in HTML, PDF, and PostScript formats and can be viewed in a browser or printed in hard copy. Changes can be developed easily and rapidly

to ensure fast response to user requests for new reports.

- **Web Services Security**—CACHÉ extends its support for the WS-Security 1.1 standard. Recognized industry-wide as a foundation for developing secure distributed applications and web services, WS-Security is specified by many complex, highly detailed documents that often require weeks of study. In sharp contrast, InterSystems' implementation of WS-Security 1.1 enables development of pragmatic, easy-to-create, secure web services that can be rapidly completed while ensuring standard adherence. As a result, critical security features including digital signatures, key encryption, creation of X.509 certificates and Security Assertion Markup Language (SAML) assertion tokens are easily and quickly implemented.
- **Superior System Management**—Multiple new features make system management more comprehensive and easier to implement. New levels of validation, increased documentation, and more extensive system information are now available to ensure

that system configuration is valid and that integrity is maintained. The IPv6 standard has been implemented and database truncation to enable recapturing needed space, an embeddable installation process to simplify system provisioning and user interface improvements for the system management portal are also included.

The reaction from early adopters of the new features has been very positive. For example, Bio-Reference Laboratories, Inc. (NASDAQ: BRLI), the third largest full service laboratory in the U.S., is leveraging Zen reports in one of its core applications.

"We're using Zen reports to produce standard and graphical PDF reports, labels, and forms...none of which were possible with our legacy system," said Mike Senatore, Application Development Manager. "The reports are easy to produce, which saves a lot of time, and they have a consistent look and feel. Feedback from internal users and external customers has been very positive," Senatore continued. "Moreover, the Zen reports eliminate any need for external reporting, which has a positive impact on our bottom line."

## Database Performance Faster than Ever

"All of these enhancements are complemented by performance improvements in class compilation, XML handling, de-journaling, namespace activation, and other areas," Nagle said. "The improved performance underlines our corporate standard which specifies that every CACHÉ release should be faster than the previous offering, regardless of how many or what types of new capabilities are added. Our customer base expects and appreciates our commitment to meeting that standard."

For more details on new CACHÉ features, view the InterSystems video at: <http://www.youtube.com/watch?v=GnYDN5wO4U8>

### About InterSystems

InterSystems Corporation is a global software technology leader with headquarters in Cambridge, Massachusetts, and offices in 21 countries. InterSystems provides innovative products that enable fast development, deployment, and integration of enterprise-class applications. For more information, visit [InterSystems.com](http://InterSystems.com). ■



## Revelation Software Announces Release of OpenInsight Development Suite 9.1

Revelation Software announced the availability of the latest re-

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lease of OpenInsight Development Suite (OI) 9.1. OI 9.1 provides many new features including: 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.

Also new to OI 9.1 are the following features:

- The ability to send a fax from OpenInsight using the standard Windows Fax Server (included in XP, Vista, Server 2003 and Server 2008).
- The ability to insert graphics and textual separators within OpenInsight menus.
- The ability to send an e-mail using SSL.
- The creation of a task scheduler that can be called as an API or as a GUI.
- The ability to process system indexing utilizing the Engine Server.
- The ability to create code templates in the System Editor++.

"This release was originally scheduled to only include bug fixes to OpenInsight 9.0," said Robert Catalano, Director of Sales, Revelation Software. "As more and more new features were being introduced to the product we decided to make this a major release."

The OpenInsight Development Suite 9.1 will be offered in three versions; Desktop Edition, Server Edition and Enterprise Edition. Each Edition is targeted to meet the needs of specific market segments. All Editions of OI 9.1

are Network Ready and include the Universal Driver 4.6 with the purchase of a new license.

"This release continues our commitment to extended OpenInsight by embracing new technologies. We have already begun development on OpenInsight 9.2 which will include a complete web-based front end to OpenInsight," said Mike Ruane, Revelation Software President/CEO.

OpenInsight Development Suite 9.1 is available from Revelation Software, or through their network of resellers. See Revelation.com for details.

### **About Revelation Software**

Founded in 1982, Revelation Software delivers a suite of application development tools and companion services that take full advantage of leading network computing architectures, messaging, groupware, and client server platforms. Today, the company's flagship product OpenInsight is the only database development and application environment that provides both Windows and Java-based GUI tools to develop and deploy web-based and client server applications that support native and relational XML, SQL, Lotus Notes, and the leading legacy MultiValue data sources such as Arev, Pick and IBM Universe. There are more than 1.5 million licensed users of Revelation products across 60,000 deployed sites worldwide. The company has offices in Westwood, New Jersey, as well as a European distributor in the United Kingdom, and an Asia Pacific subsidiary in Australia. ■

## **NEWSMAKERS**

*Continued from page 21*

Zumasys' unique hosting architecture allows companies to move their existing software applications, including legacy systems, to a hardened data center with anywhere, anytime remote access via a browser. Comprised of an enterprise VMware farm running on NetApp storage, this highly-flexible service incorporates rental licensing from Microsoft, Citrix, and RIM and is perpetually upgraded by Zumasys. By outsourcing management of their IT infrastructure, Zumasys' customers benefit from the latest software and hardware technologies without the upfront capital expense.

"I love Zumasys hosting service because I get what I need, where I need it," said Dean Baltzell, CFO of MeriCal, Inc. a 49-year-old private label vitamin manufacturer based in Anaheim California. "I work from five locations and I get the same desktop and data every time without any adjustments. Zumasys takes the guess work out of IT for MeriCal."

"We are pleased to be growing our hosting initiative and overall sales in the present business climate," said Paul Giobbi, President of Zumasys. "While our recent growth has come organically, going forward we are excited about acquiring other IT providers and talented professionals that will help us get to the next level."

Zumasys is passionate about technology and relationships. This passion manifests itself in the company's culture and during Zumapalooza, an annual gathering of the company's top 250 customers. This invitation-only technology education

event brings together customers, vendors and Zumasys engineers and has allowed the company to build an ecosystem of strong partnerships. Zumapalooza 2009 will be held on September 20-22 at the Newport Beach Marriott Hotel & Spa. For more information, visit [www.zumapalooza.com](http://www.zumapalooza.com).

### **About Zumasys, Inc.**

Zumasys specializes in implementing infrastructure technology solutions that reduce costs and boost productivity. Zumasys is a fast-growth company and its deployments have been featured in publications including Computerworld, eWEEK and Network World. Zumasys appeared on the Inc. 5000, Inc. Magazine's List of the 5,000 Fastest Growing Private Companies in 2007 and 2008; Deloitte's Technology Fast 50 for Orange County in 2008; and Orange County Business Journal's Fast 100 List in 2007 & 2008. Zumasys is a Microsoft Certified Gold Partner and holds reseller agreements with Citrix Systems, VMware, NetApp, HP, IBM and SonicWALL. Zumasys is headquartered in Irvine, CA. 866-ZUMASYS [www.zumasys.com](http://www.zumasys.com) ■

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## IS PHP IN YOUR FUTURE?

*Continued from page 9*

extensive collection of MultiValue abilities to the PHP runtime. Later versions of U2 also have web services support, which may eventually become the gold standard for connecting languages like PHP to the back-end database. (I'm still stumping for a native PHP-to-U2 connector, however.)

I can't speak to the availability of a PHP connector to other MultiValue platforms, but, in the worst case scenario, ODBC could be used to speak to the back-end database — assuming the platform has some kind of native ODBC access. PHP can even talk to a raw socket, which is a surprisingly robust feature for what is essentially an interpreted scripting language. And, in an even worse case scenario, PHP has an extensive collection of features for file I/O so a drop file interface could be created if it were the only way to move bits between contexts.

So you might be wondering, do I have to trade hours of my life away to get this running? And are there massive quantities of configuration options to keep me up at night? While PHP is really quite configurable, the installation of PHP and integration with a web server like Apache is almost effortless. Certainly there's much to tweak if you want, but PHP is installed with a common configuration file that's very workable out of the box. About the only delay to jumpstarting PHP is the download time for PHP itself (and the Apache web server if you don't already have it), which is no more than a couple of minutes for most broadband users.

The documentation that installs with PHP is quite impressive, and while I wouldn't recommend trying to learn the language from that documentation alone, it might very well be possible given the numerous samples and explanations provided. There are also many good books for PHP available at the local library or bookstore.

Finally, despite being web-friendly, PHP is much more than a web-only language. If you've ever struggled through goofy shell scripting syntax, you can use PHP instead! Need to analyze a flat file quickly? Write a quick script in PHP to read the file and ascertain what you need. Just about anything you might need to do at a command line or via a cron job, you can bet PHP probably has a feature to help you get where you're going — just like MultiValue Basic. **IS**



KEVIN KING is the President and Chief Technologist with Precision Solutions, Inc., a leader in technology solutions, support, and training. He is also the author of SB+ Solutions, an enthusiastic private pilot, and Christian guitarist and producer... as time allows.

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## BUSINESS TECH: BECOMING A SOFTWARE VENDOR - PART 5

Continued from page 19

The scale of failure is an important factor. With a project, failure is singular and you are there to investigate and fix it live. You have to manage expectations on response time and resolution.

Another expectation issue is upgrade vs. new product. As a client, I need to clearly understand why some changes are free, some are free with maintenance, some are paid changes, and some are re-buys. As a new entrepreneur, you may not be sure where those lines are as you launch version 1.0 of your first product. That doesn't let you off the hook, it just makes managing expectations that much harder.

### Managing Your Own Expectations

I'm working with a young woman now who is looking to start a fairly labor expensive business. When we looked at the costs, she came back to me with

a very common sense answer: "I'm going to start a different business, more modest, which will let me fund this business later."

At the next International Spectrum Conference, ask the vendors how they got started. In many cases, their best known product was not the one they launched initially. They started, in many cases, as consultants. They used that revenue to fund product creation. They then used the staff already in place to build the product business. In many cases, they still provide consulting.

### Managing Failure

Not every business plan succeeds. It has been my observation that the most wildly successful and the most abysmal failures have one thing in common: the relentless pursuit of a single idea or ideal. When you hit the right moment in history, with the right focus, you become wealthy and powerful. When you play that same game at the wrong

moment, you fail utterly. This is why "How I Did It" classes rarely produce success stories.

The vast middle ground between success and failure has plenty of room for people like us. We don't need to be the dominant player in an industry to have a nice house, feed our families, and pay our staff a good wage. So my advice is to be broad in your approach. Manage your own expectation and mitigate failure by always having a plan B ready.

Next installment will be the last on this topic. We'll talk about you. **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.

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## Using Twitter to Monitor your Enterprise

Twitter can be used for more than just social networking and business advertising. IT departments should not overlook the advantage that Twitter has for system and enterprise monitoring.

One of the problems of monitoring is getting the information to the person that needs to know it. Sometimes it is more than one person. Sometimes the information needs to go to the whole enterprise.

Using Twitter solves some of these problems by providing you multiple means of updating a single person or groups of people about common IT problems or statuses. Twitter has built-in SMS support, as well as e-mail and RSS feeds. To make it ever better, users following the Twitter feeds can decide how and when to receive the updates.

Sending tweets (updates) to Twitter really isn't hard. All it requires you to do is POST data using HTTP. On Linux, you can 'wget' which is included with most default implementations. On Windows, you can use 'curl', which needs to be downloaded and installed. If you have to support cross platform (Linux and Windows), consider using 'curl' since it works the same on both platforms.

Some MultiValue environments have Basic subroutines you can call instead of doing HTTP posts. Using them means you don't need to rely on Operating Systems commands.

```
SUBROUTINE SPECTRUM.TWITTER.SEND1(SETTING.ITEM,MSG,TWITTER.ITEM)
EQU AM TO CHAR(254), VM TO CHAR(253), SVM TO CHAR(252)
*CREATED BY Nate Rector, 09/01/2009
*
*   D O C U M E N T A T I O N
*
* This program is used to send twitter updates.
*
* SETTING.ITEM<1> = User name
*   <2> = Password
*
* MSG = Message to send to twitter. Must be under 140 chars
*
* TWITTER.ITEM = returns the ID, or null if tweet failed
*
*****
*** MAIN PROGRAM
*****
LINUX.COMMAND = \wget --delete-after -qO- \
LINUX.COMMAND = LINUX.COMMAND :\ --http-user=: SETTING.ITEM<1>
LINUX.COMMAND = LINUX.COMMAND :\ --http-passwd=: SETTING.ITEM<2>
LINUX.COMMAND = LINUX.COMMAND :\ --post-data status='\: MSG :'\
LINUX.COMMAND = LINUX.COMMAND :\ http://twitter.com/statuses/update.xml\
%OS.EXECUTE(LINUX.COMMAND,OUTPUT)
*
POS = INDEX(OUTPUT,"<id>",1)
IF POS = 0 THEN
    TWITTER.ITEM = ""
    RETURN
    END
*
TWITTER.ITEM = FIELD(OUTPUT[POS + 4,100],"<",1)
RETURN
END
```

Fig. 1

To send a tweet, you just have to provide your Twitter account name and password as the HTTP username/password, and include the following as POST data to `http://twitter.com/statuses/update.xml:status='message'`

I've included a Basic subroutine that uses 'wget' (Figure 1). All you need to do is provide the information and the messages you want to tweet (Figure 2). If you don't know what messages you want to tweet, think systems errors, backup starts and stops, power outages, etc.

Now, please keep in mind a few gotchas.

- Can only post tweets one every second or they will reject you.
- Tweets can only be 140 characters long.
- Twitters servers get overload on a regular basis, so you have to handle possible outages.
- Make sure you setup your Twitter accounts to be private, or the whole world can see what you are monitoring. **IS**

*Do you have a Tech Tip to share? E-mail it to [editor@intl-spectrum.com](mailto:editor@intl-spectrum.com)*

## BEST PRACTICES VS YOUR BUSINESS PRACTICES

*Continued from page 15*

Either of these procedures would be cumbersome and time consuming. So, you decide to modify your package.

The first request is to automatically print the shipper after the material transfer is entered, combining two steps. A rule I try to follow when designing modifications is *Don't lose visibility of the complete process*. So I would add a question at the end of the enter material transfer process: *Do you want to print this now?* This would still work if the company grows and someone in another department was entering the order, and it lets the operator know that a second process is being done.

The next objective is to eliminate going through the part numbers and quantities two more times. Two possible solutions are:

- In the shipping program, after the material transfer number has been entered and the transfer displayed, the program probably sequences through each part and allows the operator to enter the quantity. For your company however, it isn't possible for the quantity to be different, so we are not trying to force atten-

tion and diligence. So we add the question *Ship all as ordered?* as an option at the bottom of the screen before the first sequential prompt. If the operator enters 'Y' then fill in and display all quantities to match the quantity ordered and go on to the final 'accept' prompt. If 'N', the program would continue sequentially. Do the same thing with the receiving program, asking *Receive all quantities?*

- Add a new menu selection *Ship and Receive a Material Transfer*. This could be a program that asks for a Material Transfer number, displays it, and the only prompt is *Transfer all quantities?* The program would combine both warehouse updates.

Though the second solution may be less key strokes for the operator, the visibility of all the steps in the process is lost. If later the initial programs are removed from the menu, the company would not know that the software does follow best practices and if the company grew and added other warehouses, they wouldn't know that the complete workflow was available.

In conclusion, remember, Best Practices may only be the most common practices, and your company may have a Better Practice. If you do have a need to modify your ERP software, don't lose the functionality provided for by the original software or compromise the integrity of the integrated database. **IS**

```

...
SETTING.ITEM = "TwitterUserName"
SETTING.ITEM<2> = "mypassword"
*
TWITTER.FAILED = 0
A.NUM = DCOUNT(MSG.LIST<1>,VM)
FOR A = 1 TO A.NUM UNTIL TWITTER.FAILED
  MSG = MSG.LIST
  CALL SPECTRUM.TWITTER.SEND1(SETTING.ITEM,MSG,TWITTER.ITEM)
  IF TWITTER.ITEM<1> = "" THEN
  *** No id, then tweet didn't get updated.
  *
  TWITTER.FAILED = 1
  END
  *
  *** Must sleep for 1 second before send again, or twitter will
  *** reject the tweet
  *
  RQM 1
  NEXT A
...

```

Fig. 2



CANDI HART has been an independent consultant in Southern CA since 1980. She was known as Candi Piech when she served as president of CDBMA. She may be contacted at [candi.acp@gmail.com](mailto:candi.acp@gmail.com)

# My Journey Inside of PDF Files:

## *Converting Text Print Files To PDF Files*

### Part 2

BY KIM AMANN

**I**n the July/August issue of *International Spectrum*, I described some of the basics for converting a line printer report into an Adobe PDF file. In this issue, I will expand on the different objects that I just skimmed over previously.

The original article explained how I converted standard &HOLD& line printer text files into PDF files for the Colorado Springs Police Department (CSPD). Colorado Springs Police Department had been running their police applications under “PI/open” for many years and “Prime Information” before that.

Via a web site, the CSPD wanted to provide their users — their upper echelon commanders, City Hall officials, and the general public — the information that had previously been condemned to lay around as stacks of unread green-bar paper. One of the best ways to accomplish this was to use Adobe PDF files as the vehicle for distribution. If their current line printer reports could be converted into PDF files, this objective could be achieved.

So once again I was tasked with venturing into the *Adobe PDF Reference Manual* and doing some more reverse engineering of PDF files that contained only text lines to determine what PDF commands would be necessary to accomplish this.

For a primer for what is about to follow, please read part one of this article in the July/August 2009 issue if you have not already done so.

#### **Line Printer Page Objects**

I talked about some of the line printer page in my last article, but didn’t expand on how fonts work or a specific line that I told you to hard code.

The code (fig. 1) can actually be broken into a couple different components:

```
BT 1 0 0 1 25 760 Tm /F1 7 Tf 7.0 TL
```

**Fig. 1 Sample code for specifying Fonts**

```
1 0 0 1 25 760 Tm
```

This command defines the Text Matrix. This Text Matrix helps position the information on the page. The coordinate system available with PDFs is designed for more than just text data.

For space reasons, I won't say much about coordinate system transformations and matrices here, but if you're familiar with the use of matrices in PostScript, the same rules apply in PDF.

A transform matrix is given by an array of six numbers, the first and fourth of which determine scaling in x and y, respectively. We see in our text matrix that the scaling factor is 1. That means we will use 1-point type. The last two numbers in the matrix (25 and 760) specify a translation, in user-space units. The effect of the translation is to put our text approximately 10.1 inches from the bottom of the page, with a left margin of 0.7 inch.

```
/F1 7 Tf
```

This command defines the font we are going to use for this text. In this case, we are going to use font F1 that was defined in the Font Objects listings and the ProcSet object. The second value '7' represents the font size of 7 points.

```
7.0 TL
```

This command defines the text height. In this case, it is 7 points, matching the text width.

## Font Objects

In last article, I just skimmed over the Font object and the related ProcSet object, and how it relates to the display content.

Figure 2 displays the basic layout of the Font object. The */Type* defines the ob-

```
<<
/Type /Font
/Subtype /Type1
/Name /F1
/BaseFont /Courier
/Encoding /WinAnsiEncoding
>>
```

Fig. 2

ject as a Font object, and the */Type1* defines the font type. There are three types of fonts. You are likely going to use the built-in fonts, which are all Type 1 fonts, so specify Type 1 as the value.

The */Name* defines the name you will use to reference this font in the text body. The standard is F1-F9999. Not very easy to read, so be sure to keep track of which font name represents which font layouts.

The */WinAnsiEncoding* statement allows you to specify what font character set you want to use. The three main options are MacRomanEncoding, MacExpertEncoding, and WinAnsiEncoding

You will notice that the font names are duplicated (fig. 3) for bold, italics, and oblique. So if you want to include bold or italics in your output, you will have to define these as separate fonts, and then include them in your display text objects.

```
Courier
Courier-Bold
Courier-Oblique
Courier-BoldOblique
Helvetica
Helvetica-Bold
Helvetica-Oblique
Helvetica-BoldOblique
Times-Roman
Times-Bold
Times-Italic
Times-BoldItalic
Symbol
ZapfDingbats
```

Fig. 3

## Info object

The info object (fig. 4) is not required, but can be helpful when you are trying to provide information about when the document was created and who or where it was created. The following values you can provide:

*/Author* The name of the person who created the document.

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*/CreationDate* The date the document was created.

*/ModDate* The date the document was last modified.

*/Creator* If the document was converted into a PDF document from another form, this is the name of the application that created the original document.

*/Producer* The name of the application that converted the document from its native format to PDF.

*/Title* The document's title.

*/Subject* The subject of the document.

Continues on page 34

```
<<
/Creator (TXT2PDF)
/CreationDate (D:20080318092746)
/ModDate (D:20080318092746)
>>
```

Fig. 4

# Are You Connected?

BY SHANNON STOLTZ

**W**hen I started out in IT, we didn't have e-mail, or the ability to look up answers or research vendors online. We used manuals, letters, faxes, and the phone.

To learn about new technology, or hear how others were solving challenges, we went to conferences and user group meetings. We asked others we knew, who referred us to others they knew. And through these connections we grew our knowledge, our contacts, and spread the word about the technology we were using.

Things have changed. Today, if I'm struggling with an issue, I head for the Internet and my good friend "Google." Or, I head over to one of my online groups and do a search or ask a question. If I'm looking for a technical solution, I go online to see what's available and start researching vendors — looking at what they have to offer and to see what others say about them.

We still have our conferences and user groups which are great ways to build relationships, glean information, and check out what others are doing in the industry. But if I need information, the online world is the first place I go. What about you?

From its inception, techies like us have embraced Internet technology as a way to communicate

and share information with each other. *For years*, we've had our bulletin boards, forums, news groups, and listservs — embracing and re-purposing the technology much earlier than most. As Yahoo groups and Google groups came available, we made use of those too.

Connecting with others online helps us solve problems, build personal and professional connections, and find answers. So much so, that the rest of the world is now hooking up online in droves — doing what we've done for years, only with new and different tools. And, a whole new term has developed — social media.

Personally, I'm not fond of all the hype about "Social Media." After all, we've been connecting online for years. But these new social media tools — blogs, LinkedIn, Twitter, and Facebook — are more user-friendly and, in most cases, more viral, meaning their content self-perpetuates and spreads.

These new tools provide a much more dynamic way of connecting online than we've had before. Social media has become so prevalent and so



powerful that it was a tipping point, an influencer, in last year's U.S. presidential election.

### **Should We Embrace Social Media?**

But should we forsake the tools that have served us well for years and embrace this new technology? Well — that's a good question. One we face with our business technology as well. And, my opinion is the same for both — embrace the new technology only if it adds value to you, your company, or the industry, in our case, the MultiValue community.

Personally, I was reluctant to check out some of the more interactive social media tools like Twitter and Facebook. I've been listed on LinkedIn for a while and have blogged off and on for five years, but I just wasn't interested in getting involved in social media. I didn't need yet another thing to do, and I was quite comfortable in my world, with my connections. But a client shook me from my oblivion, letting me know that if I was serious about growing professionally, I needed to "pay attention to social media."

So, for the last nine months, I have been investigating what techies like you and I can get out of today's social media tools. If you talked to me at the International Spectrum conference in March, you know I've embraced certain tools wholeheartedly. Why? Because the people I've met through social media, the connections I've made, have added value to my life — both personally and professionally. And I've been able to add value to others — connecting them to resources or information that helps meet their needs.

---

### *Connecting with others online helps us solve problems, build personal and professional connections, and find answers.*

---

Connecting online is all about building community and adding value. It's about re-purposing the technology to meet the needs of the community and building connections, building relationships, and sharing information. Yes, there are those out there who blog and tweet (a Twitter term) like a personal diary with information you don't care about. But then there are those who are sharing useful information, building business and personal relationships, and being real in a relevant sort of way.

It's like walking into a roomful of people at a user group meeting or a conference. You gravitate towards those you know. You listen to interesting conversations. You engage on topics you know something about or are interested in. And you meet new people who share common interests and perspectives. It's the same online. Today's social media adds a personal face, a personal touch, to our careers and our businesses.

On my office whiteboard, there's a quote written in permanent ink, that explains my philosophy on interacting with others online:

*"... 1) Solve problems, 2) Enhance Lives, and 3) Fulfill needs."*

That's it. If what I'm writing in this magazine, online, or anywhere else, doesn't do one of those three things for someone, then I shouldn't be

writing it or sharing it. In meeting others needs, sharing useful information with them, they learn more about me, my interests, and my perspectives and determine if they want to associate with me or not.

When I asked my techie Twitter following why programmers should tweet (be on Twitter), Rich Loeber, a software developer, summed it up best with "To share ideas, to look for help, to get a different perspective on work."

### **Avoid Black Holes — Be Strategic**

As with anything that takes up our time and energy, it's important to be strategic in how we are using social media tools. Just like we wouldn't spend our entire day hanging out at the water cooler (or in the break room) chatting with others, we can't be productive in our real work and spend hours a day talking online. Just like with anything else enjoyable, (say, watching sporting events or playing computer games), social media can be addictive, a huge drain on our time; but it doesn't have to be — if we are strategic.

Here's a few tips to consider when creating your social media strategy. Each of these apply to all types of networking, including face-to-face user group meetings and conferences, as well as online.

#### Know Your Why

Know why you are there. Do you want to build professional connections? Are you a vendor or consultant looking for leads? Are you looking for a job or looking to move to new area? Are you looking for others who "get" what you do and why? Do you want to find out what others are doing in the MultiValue space? Whatever the reason, know why

*Continues on page 34*

## ARE YOU CONNECTED?

Continued from page 33

you are spending your time in this area and what you want to get out of it.

### Know Your Audience

Know who you want to connect with. To network effectively online and in person, you need to know who you want to associate with. Is it other MultiValue professionals, only those using the same database as you are, or only people in the same vertical as you? If you are a vendor or consultant, who is your ideal customer? Once you know who your audience is, it is easier to find them online through groups, keyword searches, and other tools.

Also, be sure to participate and engage appropriately for your audience. Just as in real life you keep a certain line between your personal and professional lives, it's good to do so online as well. For example, I go online as an IT professional, as a business owner, and as a mom. It is necessary for me to use

Continues on page 36

## MY JOURNEY INSIDE OF PDF FILES: "CONVERTING TEXT PRINT FILES TO PDF FILES" - PART 2

Continued from page 31

*/Keywords* Keywords associated with the document.

This information shows in the document properties window (fig. 5), and is also used by web search engines for indexing.

### Summary

The programming required to convert line printer reports to PDF file can be accomplished in 200-300 lines of code by anyone. The key to success is generating the correct Adobe commands that wrap around the text lines of the report.

If you have a need to do this and are too busy to take it on yourself, please feel free to contact me to take advantage of the work I've already done. This article is meant to be an exposure of this technology to the reader and how to do it

yourself. It is not meant to be a sales pitch. But the practical reality is TXT-2PDF exists and is available to use. **IS**



**KIM AMANN** began programming for a bank in 1964 in COBOL and Assembler.

In the early 80s he crossed over from the dark side and began developing Prime Information based applications as an independent contractor. Now using UniVerse and UniData, he has helped a wide variety of businesses and organizations become more efficient.

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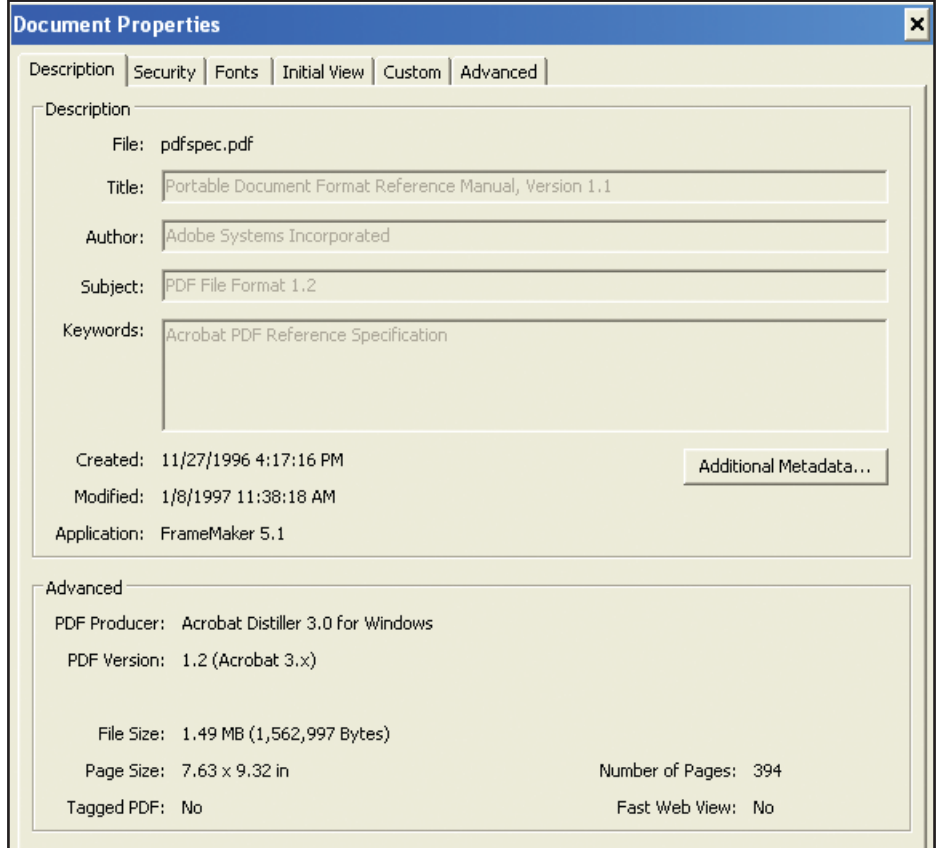


Fig. 5

## CLIF NOTES

Continued from page 38

out, writing in such a confined space can be one of your biggest challenges.

I have, however, discovered that 140 characters is plenty of space to sound like a jerk. Avoid sarcasm, teasing, sly humor, or cute turns of phrase. By the time you edit them down to 140 characters, they have lost their original tone, and you will be sorry you hit the send key. Trust me on this one.

One of the big keys to successful business or professional tweeting (based on what I like) is to contribute. By that, I mean, add something original. There's nothing wrong with re-tweeting (like forwarding a tweet), but there are some people who that's all they do. One psychologist I was following was operating in batch mode and every night would blast in about 10 or more tweets that were nothing by re-tweets of what someone else had posted — no comments, no nothing. It appeared like she had nothing of her own to say.

The same goes for twitter feeds — 'bots that simply copy something from another web source into Twitter. I might be in the minority, but I can follow that kind of thing with RSS. I find the live person's thought and ideas of most value. I can always get raw data.

If you want a good example of someone who I think uses Twitter in a professional/business manner well, follow @gtdguy (David Allen, of *Getting Things Done* fame) for a while. Even when he re-tweets a link, he usually adds some comment about his opinion of it. And just like in the "meat" world where you know whose opinions you value and whose you don't, I've discovered that if he thought it was interesting, there's a good chance I will, too. So I click and read.

In my own mind, I've concluded that while the original purpose of Twitter — to answer the question *What are you doing?* — has little use in the business

Continues on page 16

## Senior OpenInsight Programmer Needed

Novadebt, a Freehold, New Jersey based non-profit consumer credit counseling agency seeks a senior programmer and is offering a terrific opportunity for an individual who has experience programming in Open Insight or in a combination of Open Insight and Advanced Revelation. The salary range is \$70-\$75K per year. Novadebt offers extraordinary benefits and a very generous paid time off and holiday package. **ONLY THOSE WITH OPEN INSIGHT EXPERIENCE SHOULD APPLY.**

Send a resume and cover letter to [jobs@novadebt.org](mailto:jobs@novadebt.org)

Title: Senior Programmer - design, program and support the Credit Master system.

Responsibilities:

- Use Open Insight to implement new programming and modify existing programming within the Credit Master system to achieve program requirements, utilizing any special programming techniques necessary to achieve the most effective program design.
- Lead in the design and architecture of the Credit Master system
- Test and debug programs, ensuring all requirements have been achieved
- Monitor performance of programs after implementation
- Design and implement programming designed for cross-platform exchange of data to integrate Credit Master with other applications and systems
- Provide mentoring and knowledge transfers to less-experienced team member
- Provide progress reports to the Senior IT Manager upon completion of project milestones
- Aid in the development of end-user documentation describing programming function and user interface instructions
- Provide Tier 2 & 3 technical support for Credit Master system issues
- Evaluate issues within the Credit Master system as reported by users through data analysis, program analysis and program debugging and develop and initiate an action plan to correct issues
- Design and implement reports for data analysis related to programming and user requirements
- Other duties as assigned

Requirements:

- 7 + years experience programming in Open Insight, or 10 years programming in a combination of Open Insight, Advanced Revelation and another similar multi-value linear hash database development platform.
- Proven ability to design and implement effective user interfaces.
- Proven ability to integrate systems across platforms using Electronic Data Interchange, Web Services, ODBC Drivers, import and export utilities, and other protocols
- Intermediate knowledge in Microsoft Office (Word, Excel, Outlook)
- Ability to manage several concurrent projects and produce desired results without close supervision
- Ability to interpret a variety of instructions furnished in written, oral, diagram, or schedule form
- Ability to understand complex problems and work through those problems in a logical fashion
- Ability to apply knowledge of the company's operations to program design
- Exceptional verbal and written communications skills
- Ability to work in a team environment
- Familiarity with PC Hardware and basic networking concepts
- Responsibilities may require evening and weekend work in response to the needs of the systems being supported

## ARE YOU CONNECTED?

*Continued from page 34*

different social media profiles for different audiences. My mom audience could care less about communicating the value of technology; my technology audience really isn't interested in my views on parenting and education. It's okay to be real and human. In fact it's necessary to be effective online, but keep it appropriate for the audience.

### Schedule Your Time and Use a Timer

Know how much time you want to spend connecting with others. Schedule your time and know when your time is up. Use a timer if you have to.

At user group meetings and conferences, we schedule our time. We know when the meeting is going to start and when it is going to end. There's a finite time slot for it. But with social media, it's a perpetual conversation. It's really easy to get started and lose an hour or more. You can join in at any time and leave at any time.

As you get more value out of your online relationships and contacts, you may want to change how much time you spend there. I started out on Twitter logging in once a week, now I log in twice a day to check messages like I would e-mail or voice mail, but I try to limit each session to 15 minutes.

### Be Selective in Your Tools

Just as you wouldn't use every Business Intelligence tool out there to build your dashboard, you should be selective in what social media tools you use too. There's a lot out there, but the top five are Blogs, Twitter, Facebook, LinkedIn, and YouTube. And you probably don't have time to interact in all five of those. Choose the ones that give you the most value, that help you accomplish your goals and build the relationships you want to build. (See Fig. 1)

### Give More than You Get

Online or offline, no one likes to be around someone who only talks about

## Get Connected in the MultiValue World

Here's a sampling of ways you can connect with other MultiValue professionals in real life and online. Not a full reflection about what's available, but enough to get you started.

### Conferences

International Spectrum Conference - April 12-15, 2010  
[www.intl-spectrum.com/Conference/](http://www.intl-spectrum.com/Conference/)

### User Groups

- SAPUG - Seattle Area Pick User Group  
<http://www.sapug.org>
- TEXMUG - Texas MultiValue User Group  
<http://www.texmug.org>
- CMUG - Colorado MultiValue Users Group  
[Http://cmug.plaxogroups.com/](http://cmug.plaxogroups.com/)
- SoCalRUG - Southern Calif Revelation UserGroup  
[http://www.srpcs.com/rev\\_socalrug.aspx](http://www.srpcs.com/rev_socalrug.aspx)
- Atlanta Area Pick Users Group - AAPUG  
<http://www.aapug.org>
- International U2 User Group  
[www.u2ug.org](http://www.u2ug.org)  
- on LinkedIn as U2 Users Group  
- on Twitter as @u2ug
- Pennsylvania Area Datatel Users Group  
[www.padug.org/](http://www.padug.org/)  
- On Twitter as @PADUG  
- On Facebook

### Google Groups

- jBase  
[groups-beta.google.com/group/jBASE](http://groups-beta.google.com/group/jBASE)
- MV.net Developers Forum  
[groups.google.co.uk/group/mvnet?hl=en-GB](http://groups.google.co.uk/group/mvnet?hl=en-GB)

### LinkedIn.com Groups

- European MultiValue User Group
- Pick User Group
- TEXMUG - Texas MultiValue User Group
- VMARK: U2 and Informix supporters
- SAPUG - Seattle Area Pick User's Group
- Northgate Reality group
- Entrinsik Informer User Group
- Multi-value Database

### Facebook.com Groups

Tip: Use the Facebook Search box to find the group

- Pick Systems
- SAPUG
- U2 Users Group
- InterSystems Cashe User Group
- Pennsylvania Area Datatel User's Group

### YouTube Channels

For a sampling of MultiValue related videos from Mark Pick, Revelation, Intersystems, Entrinsik, and DesignBias, check out:  
[www.intl-spectrum.com/s1025](http://www.intl-spectrum.com/s1025)

**Fig. 1**

themselves or their business. Self-promotion is good in small doses, but instead of telling others who you are and what you want — show them. Share links to articles, tutorials, or how-to information they might find interesting. Answer questions. Share quotes and kind words. Let people know you through your actions, so that they will think of you when they are in need of your skills or services or know someone who does.

### Remember Big Brother is Watching

Do not say anything online you don't want repeated to your boss or future bosses. And remember, just like e-mail, anything you say online can and will get passed around. Many employers and customers do online research on prospective employees, consultants, and vendors. And smart companies monitor for online mentions of their company or product name. (Google Alerts make this very easy.) I don't

## Connect with International Spectrum's Nathan Rector Online

Website: intl-spectrum.com  
Blog: blog.intl-spectrum.com  
Twitter: twitter.com/intlnathan  
Facebook: intl-spectrum.com/s1024  
LinkedIn: intl-spectrum.com/s1023

**Fig. 2**

mean to deter you, just give you a word of caution so you don't accidentally get yourself fired or burn a bridge you'll need later.

### Getting Started with Social Media

To meet other MultiValue professionals, or are curious about what's going on online, I encourage you to check out how others in the MultiValue world are using social media tools (fig. 1). Want to get to know the person behind International Spectrum? Check out Nathan Rector online at any of the

links in figure 2. And you are always welcome to join me over on Twitter at [twitter.com/ITSoftSkills](http://twitter.com/ITSoftSkills). **IS**

---

For more information on how IT Professionals and Vendors can use social media to connect with their target audiences, check out [www.itcustomerservice.com/social-media](http://www.itcustomerservice.com/social-media).

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E-MAIL \_\_\_\_\_ WEB SITE \_\_\_\_\_

SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_

(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?

- |   |   |
|---|---|
| <input type="checkbox"/> Principal/Owner      | <input type="checkbox"/> Sales/Marketing    |
| <input type="checkbox"/> President/GM/CEO     | <input type="checkbox"/> Programmer/Analyst |
| <input type="checkbox"/> MIS/DP Manager       | <input type="checkbox"/> Purchasing         |
| <input type="checkbox"/> Controller/Financial | <input type="checkbox"/> Consultant         |
| <input type="checkbox"/> VP/Department Head   | <input type="checkbox"/> Other _____        |

2. Is your company a (check one):

- |   |   |   |
|---|---|---|
| <input type="checkbox"/> Computer System Supplier | <input type="checkbox"/> Dealer/OEM/VAR | <input type="checkbox"/> Software House |
| <input type="checkbox"/> Consultant               | <input type="checkbox"/> End User       | <input type="checkbox"/> Other _____    |

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

- |                                |  |                                   |                                      |
|--------------------------------|--|-----------------------------------|--------------------------------------|
| <input type="checkbox"/> D3    | <input type="checkbox"/> Native MultiValue | <input type="checkbox"/> Reality  | <input type="checkbox"/> Other _____ |
| <input type="checkbox"/> jBASE | <input type="checkbox"/> uniData           | <input type="checkbox"/> UniVerse | <input type="checkbox"/> uniVision   |

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

- |  |                                    |   |                                 |
|--|------------------------------------|---|---------------------------------|
| <input type="checkbox"/> Accounting      | <input type="checkbox"/> Medical   | <input type="checkbox"/> Direct Marketing | <input type="checkbox"/> Legal  |
| <input type="checkbox"/> Banking/Finance | <input type="checkbox"/> Dental    | <input type="checkbox"/> Construction     | <input type="checkbox"/> Retail |
| <input type="checkbox"/> Education       | <input type="checkbox"/> Insurance | <input type="checkbox"/> Other _____      |                                 |

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

- |   |  |
|---|--|
| <input type="checkbox"/> Under \$500,000                    | <input type="checkbox"/> \$500,000 - \$1 million           |
| <input type="checkbox"/> Over \$1 million - \$5 million     | <input type="checkbox"/> Over \$5 million - \$10 million   |
| <input type="checkbox"/> Over \$10 million - \$25 million   | <input type="checkbox"/> Over \$25 million - \$100 million |
| <input type="checkbox"/> Over \$100 million - \$500 million | <input type="checkbox"/> Over \$500 million                |

## CLIF NOTES

Continued from page 39

easier for you to explore, and maybe someday, use.

Also, if you are just getting into this, you should read Shannon Stoltz's article, "Are You Connected?" in this issue on page 32. If I had a copy of that during my first attempt, I'm sure I would have had a better initial experience.

The first thing I noticed is that there are two modes of operating on Twitter. Real-time and batch mode. The real-time mode is very oriented towards the original mobile phone texting idea. This is where you find a lot of the personal users tweeting.

*"just came from the concert. meeting karen & dave at coldstone"*

I suppose that sort of thing might be of interest to a close group of friends, but not if you've got 150 followers watching your posts. (Yeah, I've still got a little bit of an attitude about that.)

Businesses and professionals, on the other hand seem to favor the batch mode. You will occasionally get someone who will tweet something in real-time mode, such as an observation about the new product demo they just sat through, but most of the business tweets I follow come in batches. They use capitals and punctuation, and they obviously are being generated by someone at a keyboard.

So by jumping into the Twitter-sphere, businesses have actually changed the orientation and use of the tool.

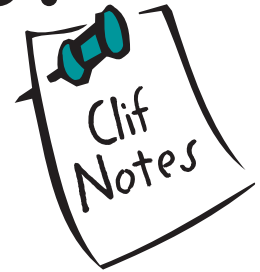
The next thing I discovered is that Twitter is hard. I'm not talking about figuring out the meanings of terms like "timeline," "re-tweet," and "hash tags." I'm talking about the maximum of 140 characters for a tweet. How can you say anything useful in just 140 characters? I need more characters than that just to clear my throat. It can be done (obviously), but when you first start

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IS 03/08

# Is Twitter For Twits?

BY CLIFTON OLIVER



I still don't quite get Twitter. When I was first introduced to it, my initial impression was that it is primarily a playground for people without lives. It starts off by saying right out that its purpose is the answer the question, "What are you doing?" I respond to this with my own question. *Who cares?*

I mean, really, why would anyone be interested in what someone else is eating for breakfast, or what TV show they are watching right now? And even if they were, what kind narcissistic exhibitionist would want to walk around all day telling the world every detail about their drab little lives?

I had a really bad attitude about the whole thing. It was very much like the non-tweeting character in the animated clip on YouTube called *The Twouble With Twitters* ([intl-spectrum.com/s1026](http://intl-spectrum.com/s1026)). So I had written it off as yet another meaningless hobby for text-addicts with way too much time on their hands.

Then I started seeing mentions of how businesses could benefit from using Twitter. What on earth? This struck me as ridiculous. How in the world could busy business people justify wasting time sending text messages around the globe about the copy machine on the sixth floor that just jammed for third time this week? But, being in business, I figured I needed to check this out and see how the artsy candle makers and aroma therapists were using this thing to advertise their

shops. I did find a good number of those kind of businesses. What I didn't expect to find was a number of Big Companies that were using it. Whole Foods, Jet Blue, and the like had a corporate presence on Twitter. Who'd a thunk it?

So I got myself a Twitter ID and dove in. Figuring that anything worth doing was worth overdoing, I announced that I was going to be tweeting from the 2008 International Spectrum conference and invited people to join in.

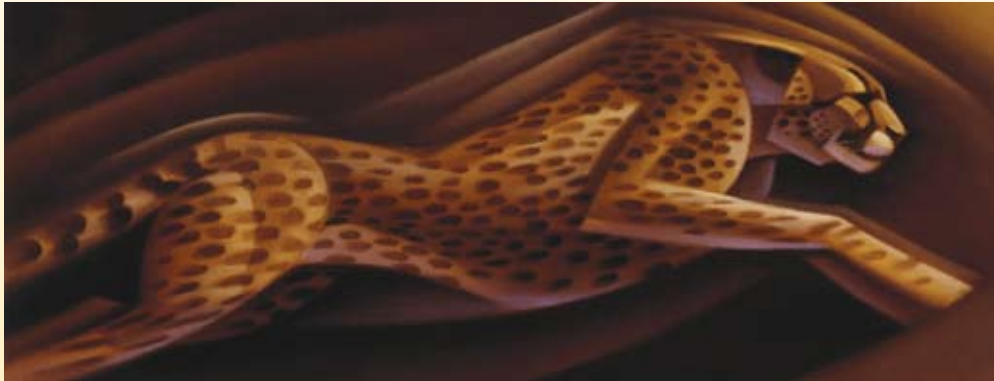
Big mistake.

I was absolutely clueless. And I proceeded to demonstrate that quite publicly. It was such a dull experience that I avoided Twitter for several months after, simply mumbling to myself that, "Yep. I was right. Twitter's for twits." But now that I was aware of the media, I kept seeing it all over the place. And I noticed that the more I watched instead of trying to jump in and participate, the more I discovered things that I thought were useful and things that irked me. So I'm going to share some observations and thoughts in the hope that it might make this beast a bit

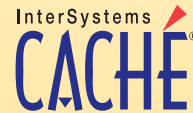
*Continues on page 38*

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