Getting Graphic

Designers each have a unique take on the world that surrounds us

Plus: **Real-World Flex**

August 14
New York City

RealWorld FLEX SEMINAR
Build the next generation of web apps

Say hello to the next generation.

It's found in the world's most inspirational places. It's pushing the

boundaries of art direction and design. Adobe® Creative Suite 2.

Today's most talented designers and art directors are working

smarter and faster because of it. Just ask the masterminds behind

INTERspectacular—they rely on Adobe CS2 to make their ideas

tangible reality. See what Adobe Creative Suite 2 can do for you.

It's everything but the idea. Better by Adobe.™

Luis Blanco and Michael Uman,
INTERspectacular

adobe.com/go/designer

Adobe

Web Developer's & Designer's Journal

May/June 2006

KTML4 Word editing in browser

Along with the most affordable **UNLIMITED** licence

Revolutionary Image Editor
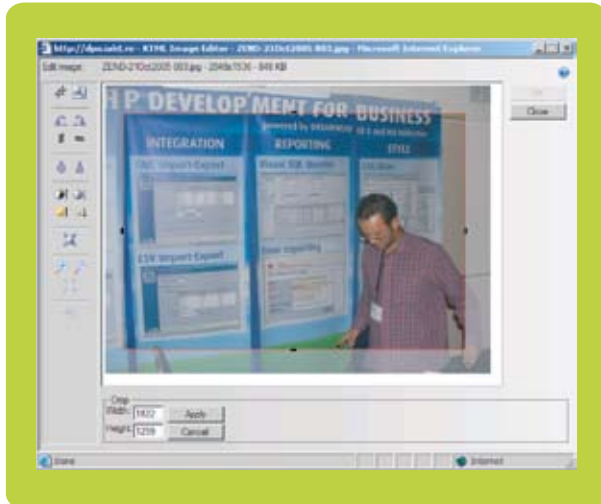
Word-like visual CSS styles
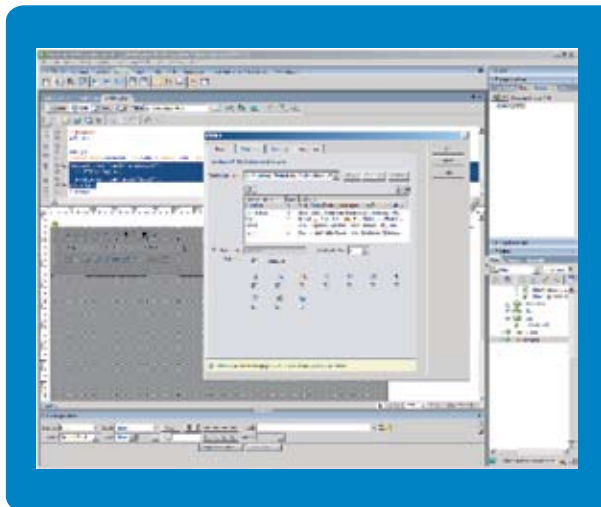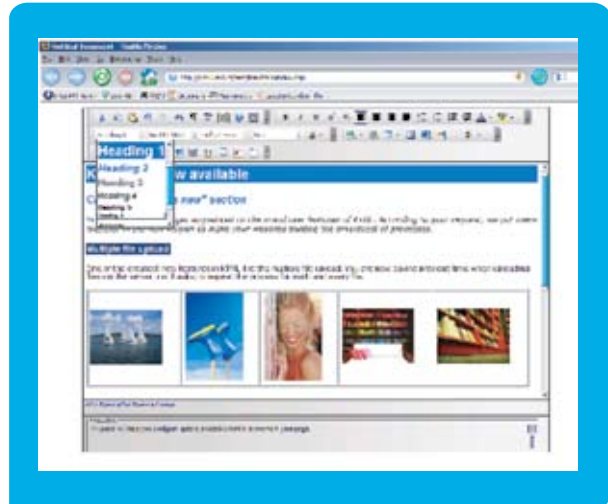
Fast Dreamweaver integration

Instant paste from Word
Incredible speed
Easy to use Word-like toolbars
Improved CSS authoring
Remote File Explorer
XHTML 1.1 compliant
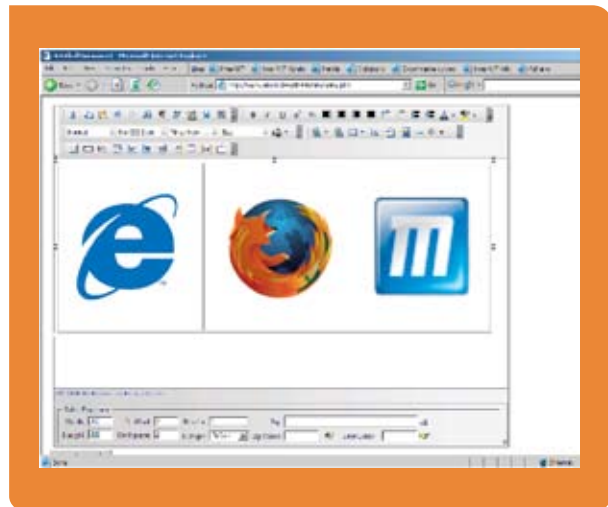
Wide browser compatibility

Multiple file upload at once
HTML Table Editor
Support for multimedia (Flash, Avi)
Documents management (.doc, .pdf)
Page templates
WAI compliant

Please visit **www.interaktonline.com/ktml4/** for details

work smart

Inter**akt**

Embrace
and Create

by Roger Strukhoff

development and Design are two sides of the same coin in the digital age, and it is very nice to consider in any case how well these two formerly separate worlds have come together over the past two decades.

Adobe was at the forefront from the beginning, with its Postscript Fonts. Based on earlier work by Adobe co-founder John Warnock at Xerox PARC and Evans and Sutherland, Postscript was integral to the Apple LaserWriter, hooked to an Apple Macintosh, all announced in 1984.

A developer friend of mine showed me back then how the Mac could deal with typefaces in an incredibly flexible and breathtakingly fast new way back then. He was no designer, though, and could only produce work that looked like crude ransom notes. "Having these tools doesn't necessarily encourage good taste," as he put it.

But having these tools did encourage good taste among those who had it. The revolution was on.

Readers of this magazine with 20+ years of experience will remember an era of xacto knives, border tape, and glue. They will remember production departments full of "galley slaves" who took extreme pride in their ability to work precisely, cleverly, and quickly.

They may also remember the fear and trepidation caused by the first digital design systems, especially when those systems came in something as innocuous-looking as a Mac. They may remember management

edicts for even more "efficiency," ie, layoffs. The computers were going to take their jobs!

Younger readers may sneer at all this, thinking that I'm describing the late 19th century rather than the late 20th century. Their mindset is most likely one that embraces change, because their world has seen nothing but a steady upward rise in the capability of systems, a steady downward fall in the price of these systems, and the daily expectation that something new and really cool is going to be created.

Although the old folks' stories may be interesting in the way that 78rpm records are interesting, the young folks are the ones who are spot on. And the good news is that most of the old folks have been embracing the technology enthusiastically for many years now as well.

The fear of losing your job to the computer is no longer a fear experienced by designers. My developer friend still has a job, and today is building Web 2.0 experiences with a combination of tools. He still lets the real designers do most of the front-end, but he doesn't so much hand off his work as collaborate with other team members.

If anything, the melding of the development and design worlds, again led in no small part by Adobe, provides new opportunities for anyone who is willing to listen, to learn, and to create something new and really cool.

Read this magazine, and you'll see what I mean. ◢

Roger Strukhoff is Editorial Director and Group Publisher of SYS-CON Media, Inc. roger@sys-con.com

Real-World Flex

by Christophe Coenraets

Some people take the dog for a walk, others go play a round of golf. Not Christophe Coenraets. His idea of a good time is to illustrate Flex 2 / JMS integration by extending a simple "realtime feed" application that he built a while back! *Web Developer's & Designer's Journal* is proud to bring you each month two of the month's best tips from Adobe's intrepid Flex Hero.

Flex and JMS: Real Time Market Data Application

The Message Service at the core of the Flex Data Services (http://labs.adobe.com/technologies/flexdata_services2/) is one of the important new features in Flex 2.

Unlike JMS, the Flex Message Service provides an actual implementation of a publish/subscribe messaging system, not just an API. It might be all you need for simple, self contained use cases where you just want to exchange messages between Flex clients. In Enterprise integration scenarios, the Flex message service integrates with, and extends existing messaging systems to allow thin clients to publish and subscribe to topics these systems manage. Flex integrates with existing messaging systems through an adapter architecture. Using the JMS adapter available out-of-the box, you can map Flex destinations to JMS topics. For example, the snippet below (added to flex-message-service.xml) defines a destination called "stock-feed", and maps it to a JMS topic called "FlexTopic".

```
<destination id="stock-feed">
    <properties>
        <server>
            <durable>false</durable>
            <durable-store-
manager>flex.messaging.durability.
FileStoreManager</durable-store-man-
ager>
        </server>
        <jms>
            <destination-type>Topic</
destination-type>
            <message-type>javax.jms.
```


Figure 1
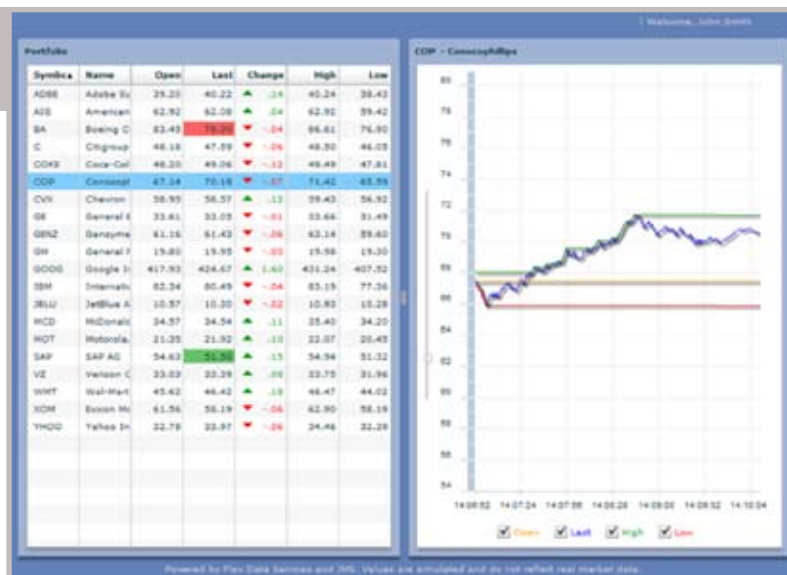
Figure 2
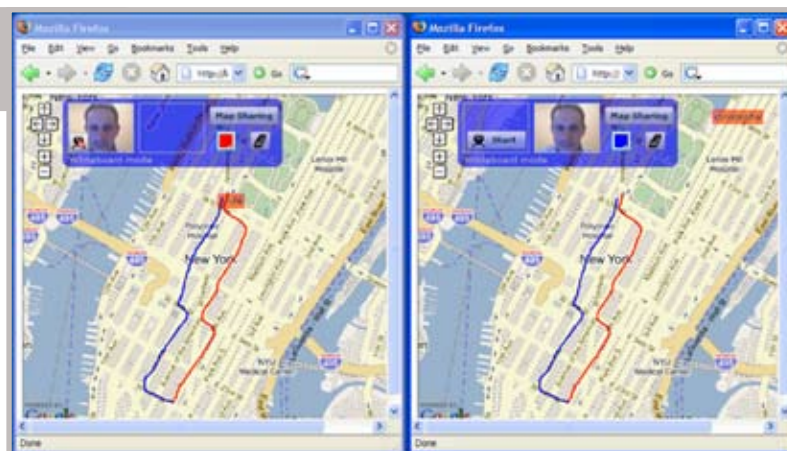
Christophe Coenraets is currently the Senior Evangelist for Adobe's developer-centric Rich Internet Applications initiative.

```
TextMessage</message-type>
            <connection-factory>jms/flex/
TopicConnectionFactory</connection-factory>
            <destination-jndi-name>jms/topic/flex/
simpletopic</destination-jndi-name>
            <destination-name>FlexTopic</destina-
tion-name>
            <durable-consumers>false</durable-con-
sumers>
            <delivery-mode>NON_PERSISTENT</deliv-
ery-mode>
            <message-priority>DEFAULT_PRIORITY</
message-priority>
            <acknowledge-mode>AUTO_ACKNOWLEDGE</
acknowledge-mode>
            <transacted-sessions>false</trans-
acted-sessions>
        </jms>
    </properties>
    <channels>
        <channel ref="my-rtmp"/>
    </channels>
    <adapter ref="jms"/>
</destination>
```

This mapping allows Flex clients to publish and sub-scribe to the JMS topic. For example, the following line of code is all you need in your Flex client to subscribe to the "stock-feed" destination:

```
<mx:Consumer id="consumer" destination="stock-feed"
message="messageHandler(event)"/>
```

To illustrate the Flex and JMS integration, I recently spent some time extending the simple "realtime feed" application that I built a while back as a sample ship-ping with the Flex Data Services. This new version looks more like a real trading application: A Java application publishes simulated real time market data to a JMS topic. The Flex client subscribes to that topic and dis-plays the data in a DataGrid and in a Line Chart that are updated in real time.

Action Points
• Run the application*: http http://coenraets.com/apps/
  portfolio/portfolio.html

(NOTE: Since my host doesn't provide JMS hosting, this version simulates data at the client-side).

*This application requires Flash Player 8.5 beta 3 available from http://labs.adobe.com/.

• Download the full JMS version of the application (Flex code + Java code): http://coenraets.com/apps/portfolio/portfoliojms.zip

• Read more about the Message Service and the Flex Data Services in my FDS overview on Adobe Labs: http://labs.adobe.com/wiki/index.php/Flex_Enterprise_Services:overview

Flex and AJAX: Google Maps Collaboration

As an example of AJAX/Flex integration, I built a simple collaboration module that you could add on top of any AJAX (or Flex) application. In this example, I chose to add it on top of Google Maps.

The Flex module adds the following collaboration features to Google Maps:
1. Map sharing: Maps are kept in sync (in real time) between users involved in a collaboration ses-sion.
2. Videoconferencing (Webcam sharing and VOIP): You can share your Webcam and microphone to add video and audio to your collaboration session.
3. Whiteboarding: Collaborating users can draw on the map. For example you could draw potential direc-tions, etc. The users' whiteboards are kept in sync in real time.
4. Cursor sharing: When you move your mouse, other users see the movements of your mouse and what you are pointing at.

The Flex features used in this example include:
1. Publish/subscribe messaging and support for real-time communication
2. Drawing API
3. Support for Webcam/voice capture and streaming (Flash Media Server is required for streaming).

Action Points
• Run a simplified* version of the application**:
  http://coenraets.com/apps/flexmaps/flexmaps.html

**Real time messaging (used for map sharing and white-board synchronization) has been disabled in this version.
**This application requires Flash Player 8.5 beta 2 avail-able from http://labs.adobe.com/.*

• Download the full version of the application: http://coenraets.com/apps/flexmaps/flexmaps.html

This application requires the Flex Data Services for pub/sub messaging, and the Flash Media Server for media streaming.

Code Reuse –
Pros and Cons

Notes of a soldier from the oh-so-bloody front

by Jesse R. Warden

depending on the scope of your project, you may have the opportunity for code reuse. The reasons you might want to do so are two-fold. First, you reduce duplication of efforts. If you have already created a hyperlink enabled CellRenderer for your DataGrid once, why do it again? Second, you create, or build upon, an ever growing utility code base. While it may not be in the "utils" package per se, you'll soon end up with re-usable events, common GUI controls and widgets, and yes even utility classes. Whether by merely being in a different folder means the client doesn't own it is up to you or your sales team.

Duplication Killed on Sight

On the current project I'm on, we re-use a LOT. My eagle-eye boss the architect head-shots any duplication he sees. Thus, we the developers have been trained to quickly identify something we create for re-use if possible and either plan accordingly when building it, or go in search of "spare parts" from existing classes throughout the main code-base for re-use. Our main base consists of 3 company names, each containing at least 3 individual "products". The first question I ask my fellow developers, and they in return, when starting to build something new is, "Has this been done before?" Re-inventing the wheel has no place in a production cycle unless you can clearly point out how the original wheel design was flawed, can be done better, and done so in a reasonable time frame approved by the client.

This also helps ensure I don't code something similar to what has already been done. To the client's point of view, they already paid for a LoginForm...why should they have to pay for a new one when all they want is for it to be green instead of blue?

"Dan, the login form's blue by default, but the mockups I have here are green."

"That's because the View using it sets it to blue; it has a color property that is an inherited style; you can style it yourself, just do color='#yourcolor'."

"Oh... nice!"

Suddenly, I spend 10 minutes finding the file and including it, setting its color, registering for its login event, and building a test file to see it in action. This instead of 4 hours doing the same building a green one. Take how much you make per hour, multiply by 4, and then subtract what you make in 15 minutes. That difference is what you just saved the client by "asking a question." I've learned the hard way to ask a lot of questions to the point of being annoying and forcing people to repeat themselves.

The same goes for building more complex things that have to be unique to a point. The most common example which I already alluded to is the CellRenderer. This is a class commonly utilized in Flash and Flex development to customize what's showing in a DataGrid column; each row will render the custom class instead of the default

and pass it an item to render. Since every DataGrid on a project is unique, you inevitably end up with a multitude of cellrenderer classes. These classes are, at least for me, notoriously hard to share so you attempt to make them as generic as possible so others can either use them as is, or do the most common thing and extend your base one to customize it to their needs.

This is an important point. The 30 or so lines of code that are required to setup a cellrenderer are suddenly already written for you, and the other developers on your team. This is a great place where inheritance really works and should be exploited. It doesn't stop there; some of the cellrenderers created could be used elsewhere as well. The only challenge is how they're designed from a visual standpoint. Styles can handle a lot, but most designers I have had the pleasure of working with have a knack of making something unique, and unique isn't always re-usable. You can either find a happy compromise with your designers, or respect their artistic integrity and recognize the fact that that they design is truly made specifically for a certain need and shouldn't be made re-usable.

Con of a Component Buffet

The first con to reusing already-built components hits the design side hardest. One of the biggest gripes people have had with any Flash/Flex component is styling and skinning. While CSS styling has come a long way in Flex 2, there are always those times where the artist (in you or beside you) goes, "It's just not

right..." Sometimes extending the base component just for styling purposes is the best repose since the base component isn't muddied with application specific styling routines.

The second con which can really come to the forefront in teams is you just don't like the component. Any developer who isn't apprehensive about using a component they didn't write makes me nervous. You trust code you didn't write? Sometimes you don't have a choice or recognize the alternatives are unacceptable. We're all human, and have our coding styles, and even if notation and other rules are enforced on your team, you can still dislike the implementation of something. This should be in the back of your mind when creating code for reuse as well. How will my code be perceived? The base rules such as encapsulation should be followed, but obviously there are other esoteric and styles of implementation that can drastically impact your involvement to ensure others spend very little of theirs getting acclimated to how it works for example.

Sum Greater Than Its Parts

For components that are made up of other components via Composition, I'll ask my fellow developers if the pieces I need are already built. For example, if I'm creating a form, I'll re-use the extended TextInput's we have. For the above CellRenderer, if it has to display a Date, I'll set the labelFunction to utilize the DateUtils class we have which will take a regular Date object and make it look like, "Tue 5/23/2006". I didn't have to write the base class of the CellRenderer and I didn't have to write a class to format dates, I just had to use the class. I've been doing the same thing for a long time without really thinking about it. For example, I take for example I can just "use a DataGrid" and "extend it with a CellRenderer". Macromedia/Adobe spent a lot of time developing one that could be reusable. Naturally, there comes a point where something is coded to business rules or a certain design, and the pragmatist in me knows when to stop trying to overdo it.

Let's turn it up a notch, though. What if you've built a DataGrid that has custom cellrenders, text fields on the bottom to filter it, and is tied to a specific ValueObject it knows how to display, and display well? Can you re-use that? Absolutely! Just because you don't right now doesn't mean you won't later. You should typically design with the intention to do so, but not so much you don't ever actually complete anything beyond a pimped out skeleton. Adamantine ingots may have great potential, but are merely blocks of immobile metal until merged with, say, a regenerative Canadian super-soldier's skeleton. Put what you write to use sooner rather than later.

This is where code reuse really shines. You're near mini-application status component which does a lot is now re-used by your team. If the components within it follow normal styling rules and expose their innards to those who wish to extend it, your golden if certain custom styling needs to be applied. What could possibly be a con about this?

Package Structure

Package structure. Package structure, for those who don't know, is how code is organized into folders. Folders are called "packages" because they have code and other packages in them depending on how deeply you nest your code. Code is placed into class files (.as or .mxml) and placed into folders. The typical naming scheme goes deployment type, company, project, and then regular code. This can take the form of com.adobe.utils. DateUtils where you have a com folder that contains an adobe folder which in turn contains a utils folder which contains the DateUtils.as file. You then import the class or "package path" into your code and the class DateUtils, and your code will know what folder to look in from the import statement.

Some projects do get large enough where you do in fact have more than one project folder. Code re-use is typically thought of through Views of some sort client developers. There is however, no reason you cannot re-use Views across projects. You just reference the package path. The pros are, work effort utilized on a project can be re-used on other projects.

Sometimes you can plan for this re-use, and sometimes it's a pleasant surprise.

Licenses

I suppose, depending on the license, that you could use it for different companies as well, but each license has specific rules on how code is used. Creative Commons is pretty simple; just keep the author's name in the code unless she/he says otherwise. From that point forward, you can modify and re-modify to your heart's content with no license fee. Others are a lot weirder. Some companies require you supply them source code. Some don't even know what source code is. Still others own everything you write while in their presence, thus preventing you from using any of your own re-usable stuff. A common tactic I've seen is to have your company's name next to the client's company name. All common views and utility classes are put in yours, and the custom developed work is put in the client's package path.

Global Ramifications

That last point is another important point. Code by residing in your company's folder its very nature has a very special, and important place; it's created for re-use. On the current project, or projects, it's re-used in many places. While all uses of it are immediately improved upon once you improve the base component, thus improving the whole project, this can have unforeseen consequences as well.

For example, you build your own List control to render extremely unique rows that animate instead of simply refreshing. In practice, you see that it is extremely slow, especially when multiple instances of it are used. You go in and re-factor it, finding many places in the code you can speed up. Suddenly, the entire app speeds up where those components are used.

One of these changes was to expose a method for updating one specific item versus all of them when a piece of data changes. This is accomplished via a new method. That's a bad thing. Suddenly all the classes that use it now have to update themselves

Innovative Tools
To Manage, Deliver and Track Streaming Media On the Internet

MediaConsole

Real-time

Using the Right Tools For the Job
Is Critical to The Success of Your Business

VitalStream reliably delivers streaming media to large global audiences using an award-winning content delivery network that powers all of our services. These services come with innovative tools that support and enable a variety of business models for online media distribution including advertising, subscriptions, pay-per-view and more.

Introducing the New VitalStream Media Player for Flash

Continuing its commitment to innovation, VitalStream is proud to announce the new Media Player for Flash to help speed up your workflow by allowing you to test and play streaming Flash video locally on your computer before you upload the files to our servers.

Download this player for free at http://www.vitalstream.com/tools/mxdj.asp

Reporting

Reporting Dashboard

To learn more about VitalStream, call (800) 254-7554 or visit www.vitalstream.com

VitalStream®

The World Leader In Audio and Video Streaming

Reflections on the
State of Almost Everything

Dreamweaver, AJAX, & Flash Video

by Kim Cavanaugh

I've had a few days now to recover from and reflect on my experiences at this year's TODCon (a.k.a. "The Other Dreamweaver Conference"), held this year in Orlando.

I'll talk about the personal and fun side of TODCon near the end of this article, but for now I'd like to run through those things I learned while attending sessions, hanging out in the hallways with some of the smart people in attendance, and in late night conversations at dinner and the hotel pool bar. All of those add to the experience of TODCon, and you can learn a lot by simply keeping your ears open and making your own connections with what you hear. For more background you can read the postings I made from TODCon at my personal blog (see the end of this article), but this is what I took away after some time to think and reflect.

Adobe Is Worried About Microsoft, and That's a Good Thing

In the Birds of a Feather session where the head of Dreamweaver engineering was present, there was a great deal of discussion centering around the features that are built into the Microsoft Expression Web Designer. Expression Web Designer is currently available in a free beta version called by Microsoft a "Community Technology Preview."

When you look at the specifications and feature set you can see why. Some of its features will look familiar to Dreamweaver users, and while Dreamweaver 8 has made terrific strides

in moving towards standards-based designs and provides much better visual support for designing with CSS layouts, clearly Microsoft has gotten the attention of the folks at Adobe who are working on the next version of Dreamweaver. Adobe would do well to be on their toes and looking at how they will differentiate their product from the new Microsoft offering.

All of this would appear to be a good thing for customers. If you look back on the life-cycle of most products that have a dominant market share the trend is to play things safe and avoid innovation. By providing competition for Adobe and their flagship web design product Microsoft has upped the ante. What should result is more innovation, competitive pricing, and a serious effort to keep Dreamweaver in its current position as the market leader. That should be a good thing for all of us.

Adobe's New Motto for Dreamweaver: Do No Harm

During the BOF session on Friday May 20th, Paul Gubbay and Scott Fegette from Adobe entertained questions from the audience. While the discussion was far-ranging, covering software from Breeze to ColdFusion to Freehand, most of the talk was centered around Dreamweaver. In particular, one topic seemed to get mentioned in several different question and answer exchanges: the need to build a web design application that doesn't get users into bad habits or use methods that they would have to un-learn later on in their careers.

This push from clients to maintain the integrity of code, to provide solid examples for both coding and design that demonstrate best-practices and to avoid highly proprietary methods in favor of standards seems to have hit home at Adobe. In several exchanges during the session both developers and designers lamented the fact that some of the code samples, methods, and techniques lead new users of the software astray, sending them down a path that is hard to recover from later on. The striking example in Dreamweaver 8 is the inclusion of table-based designs in Dreamweaver 8 that stand in contrast to the nearly useless CSS-P examples that are provided.

From the comments of the Adobe employees in attendance this message has been received loud and clear. And while it's difficult for the company to meet the needs of such a widely varied customer base, at least in their public statements it appears that the next version of Dreamweaver will attempt to strike a better balance between ease of use of those that are new to the software and providing examples and methods that are based not on marketing metrics but on best practices.

Adobe, AJAX, and Spry

There was a fair amount of discussion at the conference around the methods needed to produce the kinds of JavaScript-enabled cool user interfaces generally known as AJAX. There was a mixture of trepidation and excitement around the idea of a rich user interface that does not require complete page

reloads when new data is needed, as well as some of the plain old cool things that you can do with this mixture of JavaScript, XML, HTML, and CSS.

Adobe's response to AJAX is the Spry Framework for AJAX, currently available for download at Adobe Labs (http://labs.adobe.com). As they describe Spry on the site, and as lead engineer for Adobe Paul Gubbay elaborated on, Spry is "... a preview of the data capabilities that enable designers to incorporate XML data into their HTML documents using HTML, CSS, and a minimal amount of JavaScript, without the need for refreshing the entire page. The Spry framework is HTML-centric, and easy to implement for users with basic knowledge of HTML, CSS and JavaScript. The framework was designed such that the markup is simple and the JavaScript is minimal. The Spry framework can be used by anyone who is authoring for the web in their tool of choice."

The reaction from those in attendance was somewhat mixed, with some participants praising Adobe for placing a flag in the sand by releasing a framework with functional examples that anyone can pull apart and examine. Or, if they are so inclined, users can start using the samples provided, such as the image gallery shown in Figure 1, without fretting too much about the methods being used or how the scripts were coded. Since the Spry examples work right now, it gives developers a leg up and provides the opportunity to begin working with Ajax-based designs.

Others remarked that Spry is a good start, but weren't convinced that Adobe has provided that best possible examples either in their applications or the type of code they created to enable these functions. As one participant said, "there's way more that could be done and I'm disappointed that Adobe has done so little in this regard." And of course, there are long-standing concerns about accessibility that have to be addressed along with the old bugaboo of "what happens when JavaScript is turned off by the viewer?"

Still, the examples are solid, and the code appears easy to understand and well-documented. Along with the actual download from Adobe for the source

code, linked above, you can also read Paul Gubbay's article at DevNet to get background information on the hows and whys of Spry.

Adobe Labs: Much More to Come

Along with Spry, Adobe has been quite active in releasing early versions of their products to the public in order to gather feedback and input on the features they plan to offer in the fully engineered versions of the software. As Paul Gubbay stated in one of his sessions, taking this tack has huge advantages for them as it allows their product managers and engineers to get feedback early in the development cycle of their products before the inevitable feature lockdown and bug-hunting process begins. As Paul stated in the BOF session, there is a short period of innovation in the development of any new or updated software product followed by a much longer period of testing and fixing. Releasing an alpha version early allows the engineers to see what people think and helps them map out their path to the full commercial version that may still be many months away.

Currently at Adobe Labs you can download a number of pre-release software products such as Lightroom, Flash Player 9 and the Actionscript 3.0 library. It appears that Adobe is committed to this policy of releasing early versions of their software and asking for community input in order to get the features that most users want built into their software. Expect to see even more in the future.

Flash Video Is Huge, But It Ain't Easy

Judging by the number of participants in the Flash video session, interest is high in the ways that video can be incorporated into both sites themselves and how site developers can use this ability to generate new sources of income. Certainly the latest versions of Dreamweaver and Flash make it easier than ever to pop a video onto a web page.

While it's easy to incorporate Flash video into a site, it was also evident that the path to getting good Flash video that

loads quickly, looks great, incorporates nice effects, and is engaging for the viewer is a little trickier than just converting your family reunion videos into the FLV format, the popularity of YouTube notwithstanding.

In several sessions by Scott Fegette of Adobe and Tom Green of Community MX much was made of the integration between Adobe After Effects and Flash video. After Effects is generally known as the Swiss Army knife of video effects and, as we saw, there are awesome things that can be done with video in After Effects. But all of those capabilities require a whole new skill set involved in editing video for publication to the Web. As Scott and Tom zoomed through a few of their presentations, what I was left with was the firm conviction that there's an awful lot I still need to learn about how even basic video is produced. Learning how to best optimize video for playback in Flash video format is yet another skill that will be required of professional web developers in the future if they hope to make money by offering those services to their clients.

While there were broad hints dropped about future integration of After Effects and Flash, there still remains a great deal to learn in this arena. Adobe may make it easier in future versions of both products to do edits from simple to complex and to add special effects, but even with the coming marriage of the two products Flash video is not nearly as easy as it may appear.

"The latest versions of Dreamweaver and Flash make it easier than ever to pop a video onto a web page"

Future Product Releases from Adobe

There were no stunning jaw-dropping announcements from any of the Adobe employees in attendance at TODCon, but there were hints. In addition to the coming integration between Flash and After Effects, other products mentioned included Adobe GoLive, which will not be released as part of any future Studio packages, but will live on for a while longer as a standalone product.

Fireworks and Photoshop were mentioned as part of a "natural workflow team" that allows images to be prepared in Photoshop, compositions prepared and sliced in Fireworks, and the final assembly completed in Dreamweaver. Photoshop's current web production plug-in for Photoshop, Image Ready, would appear to be headed for the scrap heap with the common sentiment being "Thank Goodness". No word on whether Freehand is heading to the same final resting place, but the lack of any commitment to Freehand at all would not seem to bode well.

In other news, Adobe appears unlikely to release a consumer version of
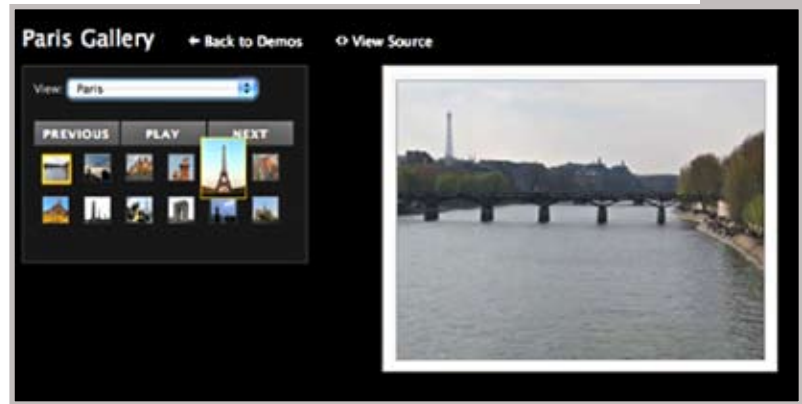
Dreamweaver or any other web design package. When asked, one employee stated that he did not see that as a direction that the company was interested in taking, despite the appearance of web design software packages from companies like Apple and the coming web features that are reportedly built into the new versions of Microsoft Office. Contribute appears to be one software product that may have some interesting new features for the casual web publisher, including rumored support for blogging tools such as RSS feeds and basic blogging templates. ▲▎

Kim Cavanaugh has been teaching and writing about web design software from Adobe/Macromedia for over 5 years. He has written two books about Dreamweaver and Fireworks, collaborated on books about Dreamweaver, Fireworks, Flash and Contribute, and continues to write extensively about Studio MX tools for CommunityMX. com. In addition to his tutorials at CommunityMX, you can find more of his tutorials at his Beginner's Guide website (www.dw-fw-beginners.com) and read about things that interest him at his BrainFrieze blog (www.brainfrieze.net). kim@communitymx.com

---

just to access one of the new optimizations.

Touching a point I brought up earlier, sharing views between projects – the problem with that is that, if you change a view in one project, you've just affected the other one. Code that was seemingly "working" you just broke, and you didn't know it because you were never compiling, nor even involved in the other project. The important point here is: if you are going to identify something as re-usable, make it so, and put it into a global package such as your company's folder, or another aptly named common folder. Developers who go into the code in those packages know full well the ramifications of what their changes could do, for good or ill.

Tool Shed

When I got my first apartment, I had one screwdriver and one small Phillips head to my name. Now that I own a house, I have a small utility closet full of tools. I'm sure by the time I'm eighty, I'll need a tool shed to hold them all. The same can

be said about your "common" code base: you'll find over time that it'll grow into an extremely useful and portable set of code. Remember, you don't have to write it all yourself, nor does your team. There's a lot of free code on the Net that you can test yourself, and then incorporate. This'll save you from having to create a hammer before you can use said hammer every project; going in, you'll be equipped to the teeth, and you'll come out with more ammo than you started with.

Summary

The greater the size of the project, and/or the more frequent the projects,the more important reusing code becomes. Making the most of a developer's time spent coding is done this way, and allows many others to benefit from that work for months, even years to come. For example, I've been using the same preloader in Flash for 3 years, written in ActionScript 1 in Flash 5. I still customize the colors, though, every time.

With reuse comes great responsibility. If you are designating something as reus-

able, it can be quite frightening to realize that a lot of others are suddenly depending on this pinnacle piece of code. That is a risk worth taking, and a strength you should prey upon. As long as you recognize the dependencies, and reduce coupling, you'll start gaining a lot more efficiency from the time you and your team spend coding.

When I first learned about reuse, I could never get it to work in practice. I either ran out of time and copy-pasted or my original design was perceived to me as being "flawed" even though it worked perfectly fine. I was just being unreasonable. Keep it simple, and you'll do fine. ▲▎

Jesse R. Warden, Flash editor of Web Developer's & Designer's Journal, is a senior Flash developer at Surgical Information Systems, an operating room software company, where he currently uses Flash MX, Flash Remoting, .NET, and Oracle to create next-generation rich Internet applications for the OR. He contributed four chapters to the Flash Communication Server MX Bible and has written articles for various publications, including one for Macromedia for a DRK.

RealWorld FLEX SEMINAR

www.flexseminar.com

Learn How to Build the Next Generation of Web Apps **from the Experts!**

August 14, 2006

The Roosevelt Hotel
New York City

Adobe Flex 2 is a complete, powerful application development solution for creating and delivering cross-platform rich Internet applications (RIAs), within the enterprise and across the web. Not until now has there been a way for enterprise programmers and architects to work with existing tools of choice, familiar programming models and integration with existing systems and infrastructure. Multi-step processes, client-side processing, direct manipulation and data visualization are all key factors in the Flex solution.

The "Real-World Flex" One-Day Seminar will delve deep into the central workings of Flex so that the seminar delegates can integrate this timely new technology into their applications, creating powerful interactive content. Delegates will learn from the experts who not only created the product but also those who are using it to the massive benefit of their employers, their customers and the Web.

"Go Beyond AJAX with Flex."

The list of topics at the Real-World Flex Seminar includes:

✓ *The Flex Approach to RIA Development*
✓ *Bridging Flex and AJAX*
✓ *Integrating The SPRY Framework*
✓ *Using Flex Builder 2*
✓ *Flex for Java Developers*
✓ *ActionScript 3.0 Tips and Tricks*
✓ *How To Use ColdFusion with Flex*
✓ *Leveraging Flash*
✓ *Preparing for Adobe Apollo*
✓ *MXML Master Class*

Who Should Attend?

✓ *CEOs and CTOs*
✓ *Senior Architects*
✓ *Project Managers*
✓ *Web programmers*
✓ *Web designers*
✓ *Technology Evangelists*
✓ *User Interface Architects*
✓ *Consultants*
✓ *Anyone looking to stay in front of the latest Web technology!*

Early Bird:
(Hurry for Early Bird Pricing) **$395***

Conference Price:
(Register Onsite) **$495***

OFFER SUBJECT TO CHANGE WITHOUT NOTICE, PLEASE SEE WEBSITE FOR UP-TO-DATE PRICING

* Golden Pass access includes Breakfast, Lunch and Coffee Breaks, Conference T-Shirt, Collectible Lap-Top Bag and Complete On-Demand Archives of sessions in 7 DVDs!

Experience
the Revolution

Interview with David Mendels

Interview by Jeremy Geelan

at SYS-CON Media's SOA Web Services Edge Conference in New York City, we had a chance to sit down with David Mendels, general manager of Adobe, to discuss Adobe's acquisition of Macromedia, Flex, RIA, and more.

SYS-CON: Where should we begin, David, with the Adobe story segueing after the Macromedia story? I think many of the people probably expected at least a hiccup of some sort. There has been none. Is it that there is a hiccup that we don't know about or that this synergy between Adobe and Macromedia wasn't just talk, it existed and that's why?

David Mendels: I think the synergy did exist. I was with Macromedia for 13 ½ years and now with Adobe over 14 years, so I was with Macromedia a long time. There are plenty of hiccups internally, I won't bore you with them, as you know how processes work. In terms of the strategy and the products, there really hasn't been. From the beginning we got together and there was a clear, common view of what we should do, how the products should come together. The management team now is a real mix of people who came out of Macromedia, people who came out of Adobe, and actually a few people who are new. I came from the Macromedia side and other folks came from the Adobe side. There was very little overlap and an incredible amount of synergy.

If you think about the tag lines of the companies, Adobe was about revolution-izing the way people communicate, that people in business communicate. At Macromedia our tag line was experience matters. Those things really are highly related, right? So now what we say is that Adobe is about revolutionizing the way that businesses and people engage with ideas and information. It sounds to me like a perfect mix of the two and it didn't require us to give anything up or the Adobe side to give anything up. They fit together very naturally.

The technology is about how people can involve other people in their businesses, so how you can involve your customers in SYS-CON through SYS-CON.TV with the Flash technology and so on.

SYS-CON: There's a little win-win ecosystem as well as a huge win-win ecosystem. Because of the Macromedia side you're well versed in what Flex is and was, and it was waiting in the wings just as that merger came. I'm hearing a lot of buzz; Ajax is on fire; we have everybody talking about anything that has four letters and an "x" in it, and you had Flex all ready. Where does Flex fit in? Was it lucky timing or was it skill?

Mendels: We've been building Flex for years. We've been at this for a while. We started talking about this idea of Rich Internet Applications back in 2000, 2001, around when Macromedia acquired Allaire; Kevin Lynch, Jeremy Allaire, and I and several other folks started talking about this idea of Rich Internet Applications, about people wanting to build applications that had the deployment characteristics of the Web, where

you could get them out to everyone and reach all your customers, partners, and supply chains and you don't have to care what platform they're on; about richness and UI qualities and the data qualities of desktop applications, so they're more interactive, more engaging, more effective. People started to do it and push the envelope with what they could do at the time with Flash. And we said, hey, that's great, let's help people do it better. We realized that the Flash tool wasn't the only answer. It was a great answer for a class of people of a certain development model, and we said let's step back and see how can we help people who come from more traditional development backgrounds who were building more traditional enterprise applications, forms-oriented applications, workflow applications, data visualization, dashboard, customer service, and help those teams of people build these things.

So we started building Flex four years ago.

SYS-CON: That's important. We want people to understand that. This is not jumping on a bandwagon; you were the bandwagon. I suppose the next worry is, has it gotten away from you? Did Ajax sort of steal the thunder of RIA or are we talking peaceful coexistence or even more than that, a collaboration.

Mendels: I think it's a sequence of all three of those. Certainly from a mind share perspective this frees Ajax. This was coined by Jesse James Garret, I think, February 18 of last year so it's a little bit

over a year old, just took off as a word, so that's fantastic. From our perspective, on the one hand, from a communication perspective, it came out of nowhere and sort of takes your breath away. On the other hand, it sort of immediately made mainstream this idea that Web applications have to be more responsive, more interactive. They shouldn't be refreshing the page all the time. Now everyone is starting to take that for granted.

Now we're saying, well, how do you do that? What are the different ways you can do that? From our perspective, we're not religious about any one technology. We've had lots of technologies over the 14 years I've been at Macromedia and now Adobe, and I think there's a continuum from Ajax to Flex and both. We're invested in Ajax. We have an Ajax framework called Spry Flex, and Ajax is great if you're incrementally adding things to existing HTML-based Web applications and you want to add a little bit more interactivity into widgets and data without refreshing the page every time.

Flex is great for building really complete, rich, scaleable, larger-scale applications that might have rich media, might have collaboration, which are data-interaction, data push and publish and subscribe; what we're focused on now and we released a couple of months ago in open source, is something called the Flex-Ajax grid, which is a way to bring them together so that you can call all of that Flex stuff from an Ajax application or vice-versa. We want to blur the lines and we want to say, use what's best for you. It's a toolbox. You have a hammer and you have a screwdriver and you have a saw, and use what's best for you.

Mendels: Usually there are three reasons why people talk to us about lock-in and why they care about lock-in. One is price. They don't want to find out later on that they're paying a tax or something over and over again. Second is skill set; they don't want to have to learn some siloed

skill that's not going to pay off for them when they go and use something else. The third is interoperability. They're never running any one technology by itself. It usually has to connect to a lot of things. So in price we made the core Flex framework free.

SYS-CON: *That's pretty straightforward.*

Mendels: There's no lock-in there in the sense that there's no tax. In terms of skill set, we decided to standardize the core engine on ECMAScript. We joined the ECMA committee, the European Computer Manufacturer's Association. It's a standards body. ECMAScript, for those of you who don't know, is also what's known as JavaScript. We joined the technical committee. We actually are the leaders of that technical committee, what will be called probably JavaScript 2. We call our implementation ActionScript 3. It's a full standard now. We're committed to sticking with the standard so you're not siloed and locked in to some proprietary funky language. Then the third is interoperability and things like the Flex-Ajax bridge. You can call into Flex from anything outside of Flex and call out of Flex into anything else.

SYS-CON: *That's quite recent so there's a possibility that many people may not know that so it's important to understand and we can find out about the Flex-Ajax bridge on the site. This is real. It's not like it's just an overnight…*

Mendels: Yes, and one of our challenges is getting the word out because when we first launched Flex, it wasn't free and we didn't have the Flex-Ajax bridge, and this has been a big sea change over the last year. Our aim here is, we're not interested in being a niche technology. Adobe is obviously a very large company. We have millions and millions of customers, and our aim is to have millions and millions of developers using the Flex framework. Some of them are going to use it embedded inside of Ajax applications; some of them are going to use it for standalone, larger scale applications; some of them are going to use the server and the data services stuff, some of them aren't. Not everyone has to use everything but you

can pick and choose your parts, and we're going to make it possible for millions of people to get into.

SYS-CON: *One of the pleasures of that is what I see is this agility, which we are constantly exposed to. I am wondering whether what people could take from this interview is that they have a chance to connect with a company that is this agile, that does respect them. And in terms of size, you probably are going to be the next huge, huge software company.*

Mendels: We already are a pretty big software company, but I appreciate your point about involvement in the community. That's always been a key part of how we approach, how we build our software. I think it's always been a key part, but actually over the last year or two we're trying to do more. We opened what we call Adobe Labs last fall where we put alpha builds of Flex out to the public and we did that with Lightroom and we did that with Spry, and we're doing that with more and more products. Increasingly you'll see us releasing our products long before they're commercially ready, for free, for people to test out, to provide feedback, and we've had 50,000 people in the beta program for Flex. We have 100,000 people downloading other products on labs. We have tons of activity and tons of feedback and it's having a huge impact.

What you'll see, I think, from many of our teams is that we are much more open about how we build our software, moving to shorter development cycles so we can talk about what we're doing and then release it and then talk about what we're doing and release it, as opposed to these long, monolithic, secretive, 24-month schedules that's more traditional in software. I think as a commercial software company we've always tried to be very open and engage with the community and engage with our developers and our customers, but I think even there we have a long way to go. I think we're learning a lot from the open source community and from other types of approaches, and saying hey, let's do more of that.

SYS-CON: *Every time people talk about Adobe, talk about the merger, we tend to*

"Our aim is to have millions and millions of **developers using the Flex framework"**

Mendels: The group I run at Adobe is called our Enterprise and Developer Business Unit. We have a couple of different business units; the biggest is the Creative Business Unit, which is where products like Photoshop and InDesign are, and now also Flash and Dreamweaver; and in the Enterprise and Developer Business Unit, Flex and ColdFusion, and also a major product line of ours called LifeCycle. So a lot of different things.

What's LifeCycle? LifeCycle is about connecting people and processes and information in document work flows and helping people to build applications that can streamline what have traditionally been paper-based processes, whether it's a mortgage loan process or an insurance process using PDF, using interactive forms in PDF, building that into workflow, then creating composite documents, security note documents, adding rich management to those documents, sending them back to take very complex business processes and really streamline them and reduce the cost and increase the efficiency.

One of the things we've really focused on in the past six months since we joined Adobe is, how can the idea of Rich Internet Applications in Flex and this idea of intelligent documents in LifeCycle come together. We have some beautiful examples in the labs and a lot of stuff that will be coming out over the next year or two where you can take these rich front ends with Flex and tie them into back ends that have these document workflows to create powerful applications and solve interesting problems. We're seeing lots of interest in government and in banking and in health care and in life sciences; it's an exciting time.

Mendels: Yes, ColdFusion is doing great.

Mendels: What we have right now is early in the Mystic beta and that is coming out the end of June together with Flex, and what we've done is, we've rolled out all the hot fixes and bug fixes of the last year into a single release and we've built a whole bunch of new functionality for interfacing with Flex. One of the things we're really focused on is how do we help the ColdFusion audience take advantage of this new technology using what they already know and using the technology area of Life Cycle. That's coming out at the end of June and it will be free to all the ColdFusion users. Next year you will see Scorpio, which will be ColdFusion 8. The team is hard at work on that and we have some really great stuff coming. You'll see it in labs before we ship it so there will be a chance for you to give us feedback.

Mendels: I think you'll see lots of interesting synergies with ColdFusion and PDF. Even before we merged we were using ColdFusion to generate PDF reports. You'll see us generating PDF forms and secure PDF documents and all kinds of things that the ColdFusion audience will have an opportunity to do in a way that nobody else can.

My Website + Google =
My Online Identity

Google is the only company that got Identity 2.0 correct

by Jesse R. Warden

I just got an e-mail from a recruiter of sorts. They want me to do phone Flex/Flash consultation for a 20-40 minute paid phone call. Apparently, Ether (www.ether.com) could make money if they employed some sales teams. It seems all of California is reaching out worldwide, looking for people to come to live and work there. The reason? To be tech lead in their startup and manage contractors and outsourced individuals to make bling and fame in Web Deux Point OMG. If my hunch on what this call is about is correct, this'll be the third startup this month looking for Flexcoder meat.

While I'm glad the resurgence in tech is creating a plethora of new companies and re-energizing budgets of old ones, one thing is abundantly clear: Google is the only company who inadvertently got Identity 2.0 (http://www.identity20.com/media/OSCON2005/) remotely correct.

Case in point, the recruiter wants me to fill out a form on their website with my personal information. Usually, I'm all for this. As long as my address and phone number isn't required, I don't care what you have documented about me. The address you can easily get on the Internet, but when I put my digits out on the Net a few years back, I got some whack phone calls.

The phone number being a required field made me panic, and I gave up. I merely replied to her e-mail with my digits. Four years ago, the paragraphs from a multitude of job websites, and the advice of being professional from a variety of role models would resound\ loudly in my head. I would have read the e-mail three times, followed the instructions in my head, then followed them for real, and hand-crafted a response. Now that I'm not starving? Totally different. Granted, I'm still professional as can be, but I'm so sick of filling out my information on websites. In 2002, I polluted the Internet like the pollen of Georgia does the atmosphere, and inputted my info on every job website I could find. Only Monster.com came through in the end (three times in a row, w00t!).

Nowadays? My website. Jessewarden.com has everything I need: contact information, blog entries in great supply to showcase code aptitude as well as a structure that gets me into search engines. While I still occasionally get an e-mail from a recruiter who found me on Monster, most nowadays find me via e-mail lists, referrals, or Google, typically the latter for the ones I only hear from once in my life.

The time invested my personal website now provides more of a return on investment than time spent putting my information into OTHER websites years ago. My content equals more context. More context is more food for Google (and other engines, but who cares about them?) to parse. More relevant context means higher placement for relevant keywords. Those looking for things I want to be found for will find me and I don't have to pay for Google AdWords either. I already get more potential opportunity than I can handle from just spouting my mouth off about technology and other things I think are cool.

So, while the e-mail from the recruiter stated I should follow the link to fill out my information on their website to "register for our network of industry professionals," I unprofessionally replied with just my phone number. I mean, if a company that on it's about page states:

```
[the company]...differentiates
itself by its adeptness at find-
ing the 'tough-to-find' industry
specialist[s]...
```

Then isn't it logical to assume that if they are capable enough to type in "flex consultant" in a text field and pressing the enter key on Google.com, then they are more than capable of inputting the rest of my information into their database as well? Maybe it is quite a skillset jump from 1 text field to 12 for their web form, but I mean... seriously? Let's define legwork here. You give the impression you are doing "hard work" by using Google when THEY are the ones who found me with MY help... they least you can do is transpose what is on my website into your database. If some info is missing, just call me or send me an e-mail with the understanding I'll part with it if it's for a business transaction. Suddenly, there is no panic at me giving my information to yet another database out of my control and long term memory. I don't even have to remember yet another password!

You gotta give her credit though; I AM the unlucky #13 for those search results AND the description for the link goes something like:

Anyone willing to put faith in me after that rant certainly has perseverance.

Heck, just re-read the email... apparently unless I fill out the form, I can't get the consulting job. Give and take I guess.

I just obtained new bank debit card this week. My old one was getting pounded by a few services I don't use and are hard to cancel. One in particular, eFax and I took no faith in their automated chat saying that "this chat is your confirmation of cancellation". Words are cheap, bro, especially ones written for you as you click a button to automate everything you've said to me. You can't block their monthly charges because they raise their price a few cents every month, thus dodging the flags the bank imposes.

This was done because the banker I talked to was young, pragmatic, and already cynical to identify theft and other unblockable Internet charges. Most bankers older than the woman I've spoken too tell me to contact the company in question; they don't understand internet businesses don't usually have brick and mortar locations I can waltz to in order to throttle idiots. Updating those services that matter isn't so hard; most let me know they need to be updated when they try to charge and they can't. For example, my Flashcom hosting was totally cool with giving me more time and not charging a late fee, but if history is any indication, someday soon my blog will stop working and my email will stop working in the middle of the day because Mediatemple takes no crap. To the point; these various companies inadvertently ask for my permission to do so. That's cool; I'm in control and in this case, I'm the epicenter.

When my e-mail or website changes, however, that contact only information isn't updated. All the countless sites I put contact info on is now inaccurate. Again, Google solves this problem. I just wait a week for it to re-index my site.

While I think it'd be neat for some website run by a private company that exposed controlled access to your information globally to those who wanted it per your permission, right now Google already does that. I put on my website what information I want people to have access to, in this case, my email address, age, geographical location, date of birth, and profession. Google then exposes that information as relevant to those who usually need to know. When I update it, so does Google. Again, when that information changes (which isn't often), so too does Google within a week or so. My website combined with Google's ability to index it is my Identity 2.0 ...I guess (haven't watched the presentation Tony told me to: http://www.jessewarden.com/archives/2006/02/pay_for_anonymity.html#comments – who has time for such things?).

Why do recruiters then scour Google only to take out contact information of individuals to put into their database which in turn is usually not ever updated? Why not just leave it where it's fresh, up to date (at least for me), and always accessible? You don't need an on or off-site IT staff to manage your data; Google does it for you. Furthermore, this allows the individual to control what information is exposed, and if more is needed, you can e-mail the person, in this case me.

As I glance at another un-read email from LinkedIn.com, I ask the same question I ask myself every time, "What's the point?" For those who don't have an online presence (personal/professional website, LiveJournal, Blogger, MySpace profile, etc.) I can understand the need to "get yourself into" these places to increase your exposure, accessibility, and chance of positive opportunity. Not for me, though.

I guess I'll follow instructions and do what she asked. I'm probably a faster typist anyway, and I love to talk about Flex with people so what the heck. If my cell number gets hijacked, it's all good, I didn't like the look of it anyway; a stylish phone needs a stylish set of digits to go with it.

"Why do recruiters then scour Google only to take out contact information of individuals to put into their database which in turn is usually not ever updated?"

Jesse Warden, a member of the editorial board of Web Developer's & Designer's Journal, is the magazine's Flash Editor. He is a senior Flash developer at Surgical Information Systems, an operating room software company, where he currently uses Flash MX, Flash Remoting, .NET, and Oracle to create next-generation rich Internet applications for the OR. He contributed four chapters to the Flash Communication Server MX Bible and has written articles for various publications, including one for Macromedia for a DRK. jesterxl@jessewarden.com

The Future of
ActionScript

ActionScript 3 in Action
by Darron J. Schall

this month Darron's Diary looks at an Iterator implementation, at ECMAScript 4, and previews his own latest book

A Simple ActionScript 3 Iterator Implementation

I was looking for an Iterator implementation in ActionScript 3 to avoid reinventing the wheel for the umpteenth time but couldn't find one on Google, so I whipped one up quick that you can download here: (http://www.darronschall.com/downloads/as3_iterator.zip.

This should save someone a full 3 minutes of work in the future....

Usage is pretty simple and straightforward. The download includes the Iterator interface as well as a simple implementation of ArrayIterator for iterating over an array of elements:

```
import com.darronschall.util.*;

var arr:Array = [1, 2, 3];
var it:Iterator = new ArrayIterator(
arr );
while ( it.hasNext() )
{
  trace( it.next() );  // 1, 2, 3
}

var it2:Iterator = new ArrayIterator(
null );
trace( it2.hasNext() ); // false
```

You can use this code without restriction under the MIT License: http://en.wikipedia.org/wiki/MIT_License.

> "Because ActionScript is based on the ECMAScript standard, anything that happens in ECMAScript will almost certainly happen in ActionScript too"

The Future of ActionScript

Want to get an idea of what ActionScript might look like in the future? The ECMAScript committee has released a handful of public resources (http://lambda-the-ultimate.org/node/1543) surrounding ECMAScript 4. These resources give a general idea of where the language is headed.

Because ActionScript is based on the ECMAScript standard, anything that happens in ECMAScript will almost certainly happen in ActionScript too. Not to mention, quite a few of the Adobe folks are on the ECMAScript committee...

Read more at http://developer.mozilla.org/es4/ (most of the good stuff is in the proposals section).

ActionScript 3 Cookbook

My first book project is nearing completion, the ActionScript 3.0 Cookbook. Sub-titled "Solutions and Examples for Flash Developers," it is a joint venture by Joey Lott, Keith Peters and myself. It looks like it's scheduled to be released on August 1, 2006. I can hardly wait.

Darron J. Schall, an Editorial Board member of Web Developer's & Designer's Journal, has been programming long before he could drive. In school he studied programming languages, ranging from Basic to Pascal to C++ and eventually moving into Java and C# throughout college. Somewhere in the middle he got hooked on Flash 5 and it's been a crazy love affair ever since. Darron is an independent consultant specializing in RIA development. He maintains a Flash Platform related weblog (www.darronschall.com) and is an active voice in the Flash and Flex communities. darron@darronschall.com

Batch Processing
in Fireworks 8

The utility in a nutshell

by Jim Babbage

I 've lately seen a few posts on the Adobe forums and here on CMX about batch processing in Fireworks. Considering the Fireworks 8 Batch Processing utility had some noteworthy revisions, I thought it would be a good idea to go over the wizard in detail. Streamlined and enhanced file renaming, the ability to check file dimensions when scaling during a batch process and the addition of a status bar and log file are the most notable improvements to Batch Processing. There are many articles here on CMX that touch on Batch Processing, but they are geared towards specific goals. In this article, we'll examine the utility itself piece by piece. In a nutshell, you can do the following with Batch Processing:

- Convert a selection of files to another format.
- Convert a selection of files to the same format with different optimization settings.
- Scale exported files.
- Find and replace text, colors, URLs, fonts, and non-Web216 colors.
- Rename groups of files by any combination of adding a prefix, adding a suffix, replacing a substring, and replacing blanks.
- Perform commands on a selection of files.

Getting Started

You access the Batch Process wizard from the File menu (File > Batch Process).

At this point. FW wants you to select your images. If you have images you want to batch right away, it's a good idea to make your image choices now. FW will not prompt or remind you at any stage after this if you have not selected images to process. It just goes on its merry way until you hit the Batch button. At that point, if you haven't chosen images, you will be prompted once again to choose some.

Why doesn't Fireworks prompt you to select images? Because you can use this utility to create and save Batch Process Scripts as well. Creating a script is a great way to speed up future batching and does not require images, so FW just lets you go ahead and gives you the option to decide later.

In the image selection dialog, you can select specific images or a contiguous series of images by pressing Ctrl/Cmd or Shift and clicking on the images. Click Add to add the selected files to the processing list. If you want to batch the entire folder, just click Add All. You can even remove images from the processing list by selecting them and clicking (you guessed it) Remove.

At the very bottom of the dialog box you see a check box. If you have files that are currently open, you can add them to the processing list as well just by clicking on the check box. It doesn't matter if those images are in the same folder that is in the browse window. These files do not appear in the list of files, but they are included in the process.

Batch Processing does not require that the original files all be in the same folder. You change folder locations in the browse window to add files from other folders to the same batch process.

Clicking Next brings you to the Batch Options dialog. Here is where you select the batch operations you want FW to perform on the selected images (or the operations you want to add to a batch script for later use).

The top four options in the left window are the stock operations that come with Fireworks 8. The fifth option, Commands, is also a stock category, but its contents will change as you create or install more custom commands.

To add an operation to the process, just select it with the mouse and click the Add button. If you change your mind, select the operation in the window on the right and click the Remove button. You can also combine several operations into one batch process. More on this later.

The top four batch options, once added, will present you with various attributes that can be modified for your end goals. We'll look at those details in a moment. Before we do, however, notice the Back button at the bottom of the dialogue box. At any time—up until you press the Batch button further down the road—you can go back to the previous dialog boxes to make changes. So, if you forgot to add images to the processing list, you can click the Back button and make your selections.

The Export Option

Export allows you to automate the process of optimizing your images, or converting them from a non-web for-

mat such as TIFF to a format like JPEG. Once you add the Export option to the batch list and highlight it, a context-sensitive area displays at the bottom of the window. As you can see from the image below, you are given many options, including the standard export options you find in the Optimize Panel. In fact, in my screen shot you see four options at the bottom of the list that don't exist in yours. These are custom export settings I created for a tutorial a while back. I was able to save these settings while I was in the Image Preview window and make them available to the Batch utility.

At the very top of the list are two options unique to the Batch utility: Use settings from Each File and Custom. If you have already spent a great deal of time optimizing your images, you can choose the first option for exporting. If you want to override those settings, but don't like any of the preset options in the list you can choose Custom. This launches the Image Preview window and lets you create your own settings. Note however, that because several, or no images have been selected, you do not see an actual image in the preview window. In essence, you're flying blind.

Scale Option

Choosing the Scale Option gives you three ways to resize your chosen images. Oddly, it also gives you the choice of No Scaling. Why someone would selecting Scale and then choose No Scaling is beyond me.

Scale to Size

Use this setting if all your images are larger than the target size, are the same orientation and you want an exact dimension. You can choose preset dimension from the list or input your own value.

You can also scale one dimension to a specific height or width and let Fireworks proportionately adjust the other dimension. All you do is enter the desired dimension and then choose Variable for the other dimension. This allows for scaling without distortion.

Scale to Fit Area

Chose Scale to Fit Area if you have horizontal and vertical images in the

same folder. This ensures that the longest dimension doesn't exceed a certain height or width, and your images will not be distorted. This choice can also force FW to only scale files larger than the the desired target size. Scale to Size will increase or decrease the size of the selected images, to make them fit your target size.

Scale to Percentage

This option is handy if you have a group of images where you are not concerned about accurate pixel dimensions; you just want all the images proportionately smaller (or larger) based on percentage. This is also a quick way to create thumbnails for an image gallery

Find and Replace (Batch Replace)

So far, the options we've looked at are really about dealing with individual images. It's unlikely you will use these operations for sliced images, or Fireworks PNG files. Find and Replace, though, is all about batching Fireworks PNG's or even Freehand files. Find and Replace is a great way to increase productivity even though you may only be working on a single file in the batch process. Chances are that you have several objects that use the same color, or several text objects using the same font. You can either open the file and make all the changes manually, or use Find and Replace to change every appearance of a specific attribute all at once. Think of it as an External Style Sheet for FW PNGs.

The one limitation to this feature is you can only do ONE batch replace operation per Batch Process. For example. I cannot Find and Replace a string of text AND change a font.

You can search for:

- text
- fonts
- colors
- URL's
- even non-web safe colors

The images below show you all the different options available to you.

Find and Replace allows you to find and replace text strings, fonts, colors and urls. If you are using Fireworks for prototyping web pages or kiosk interfaces, this feature could save you a lot of time. Because of the editability of a Fireworks PNG file, you can search for a specific word (maybe a company name) and replace it with a new word. You can look for specific colors that appear in strokes, fills or fonts and alter them. You can change fonts throughout a design when a client changes their mind.

It will not work, however, on standard flat images such as GIF, JPEG or TIFF.

Batch Rename

This feature got a serious overhaul in FW8. Prior to the version 8 release, the Batch Rename option was pretty weak and limited. Now we have a lot more flexibility and control over the renaming of files. For each changed filename, you can do any combination of Replace, Replace

Figure 1
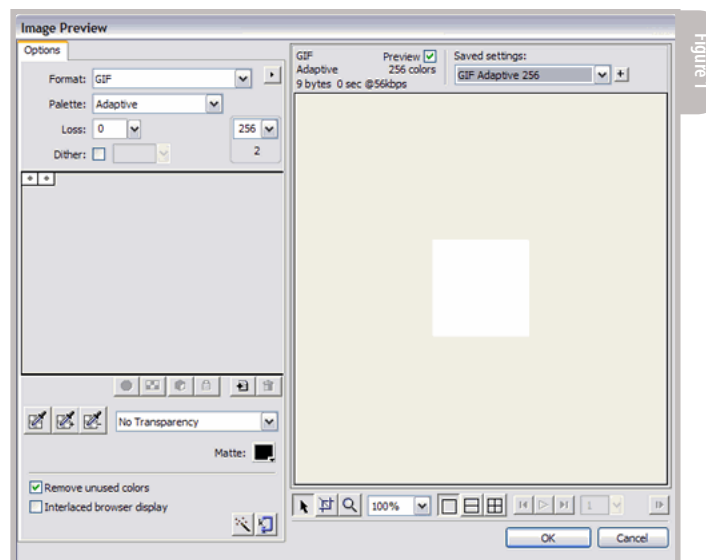
blanks, Add Prefix, and Add Suffix. For example, you could replace "dsc" with "shoreline" remove all blanks, and add a prefix and a suffix, all at the same time.

Replace with lets you replace characters in each filename with a different character that you specify, or you can delete characters from each filename. For example, when I download images from my digital camera, each file starts with the letters "dsc." I can tell FW to remove those letters and replace them with something like "img" or "image" or even something more relevant such as the event or location name.

Replace blanks with lets you replace existing blanks in the filename with a character or characters you specify, or you can delete all blanks from each filename. This happens to me ALL the time when I get files from clients who insist on treating file names like sentences.

Add Prefix lets you enter text to add to the beginning of the filename. Very handy if you are doing more than just renaming files. Maybe you are also resizing files for use in a photo gallery. If you enter "thmb_", then the file "shoreline.jpg" is renamed thmb_shoreline.jpg" when it is batch processed.

Add Suffix lets you enter text to add to the end of the filename before the file extension. For example, if you enter "_gallery", then the file shoreline.jpg is renamed shoreline_gallery when it is batch-processed.

The only feature missing here is the ability to set a numbering sequence. This, in my view, would truly round out the feature set of Batch Renaming.

Commands

For those of you who want a lot of control over what happens in the batch process, the Commands option is where you want to be. The Commands option lets you use your own Custom Commands or JavaScript commands on files.

Click the Plus (+) button (Windows) or the triangle (Macintosh) beside the Commands option in the Batch Options list to view the available commands.

Select a command and click Add to add it to the Include in Batch list. These commands cannot be edited.

Some caveats on using Commands:
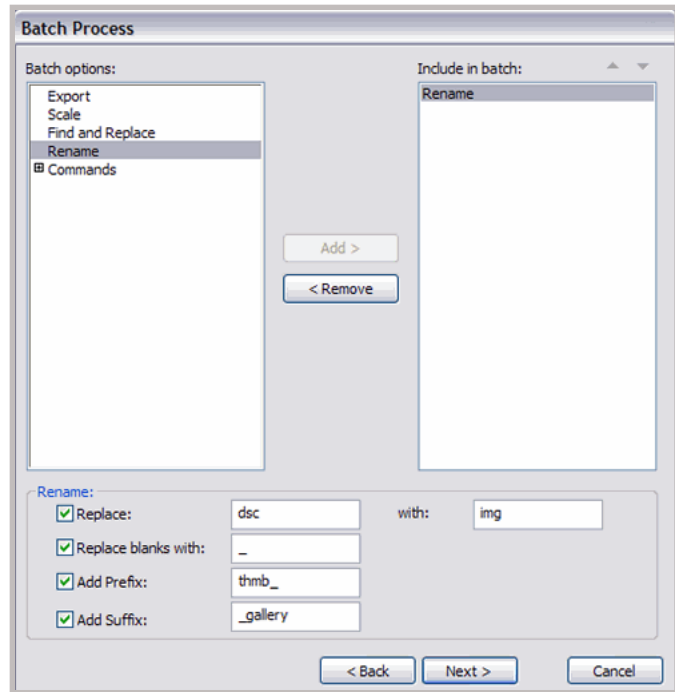• Commands cannot be edited within the Batch Utility. You would have to

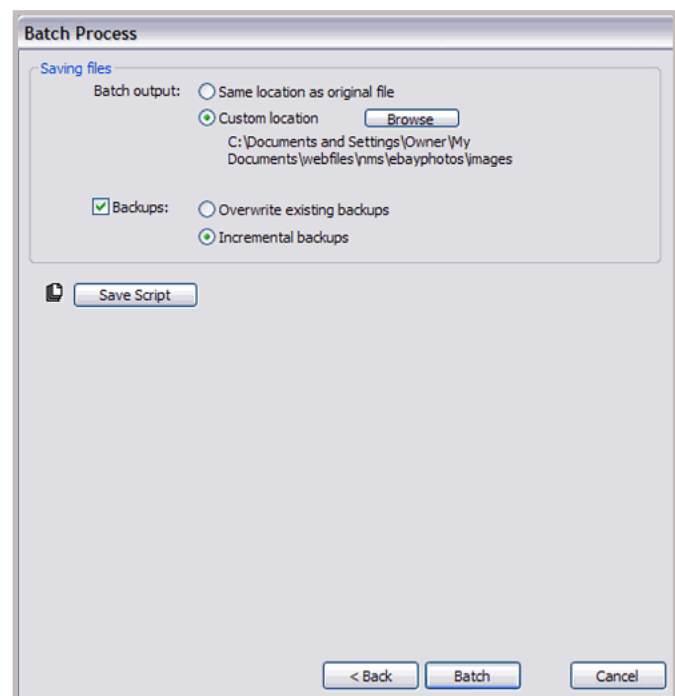edit the command in a text editor or create a new Custom Command using the History Panel first, then begin the Batch Process utility.
• Fireworks lists ALL the commands available, but that doesn't mean they can all be used in a batch process. Some commands simply do not work during a batch process. Any commands that require a selection (object or bitmap) to be made will not work.

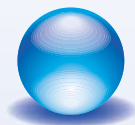This in itself will reduce the number of commands you can use in your current list.
• Some commands can be applied to flat files such as JPEG or GIF, and many others are applicable to Fireworks PNG files
• Custom Commands can also be launched as a Batch Process right from the the Commands menu in Fireworks. If you go this route, You will
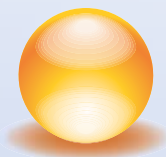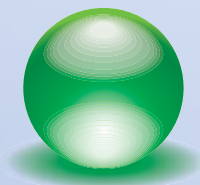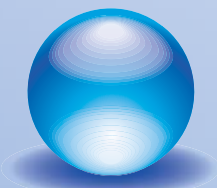
H O S T I N G .com

Developers!

Developers!

Developers!

We Love Them!

> ## "Creating a script is a great way to speed up future **batching and does not require images"**

be prompted to select the files to be batched, as can be seen below.

- Saved Batch Scripts will not appear in the Commands options list because they are already complete batch operations, and include the necessary code to launch a batch operation right from the main Commands menu in Fireworks.

For more details on Creating Custom Commands, I have several articles and tutorials dealing with Custom Commands.

Final Steps - Saving Files & Scripts

Once you have decided on all the batch operations you want to apply, click Next one last time. This is the final window in the Batch Process. Here you can designate the file location for the batched images, how backup files will be handled (if you want them) and lastly you have the option for saving all your tough decisions as a script that can be reused at a later time. If you've spent more than 5 minutes putting together this batch operation, I'd say it's probably worth saving.

Batch Output

You have two options for where to save your processed images. If you choose Same location as original file, FW will save the new files to the same folder as the originals. If the file names

have not been changed, the original files will be overwritten. The other option is to choose a custom location. This is very handy if you have images from different folders being processed or if you are concerned about losing your original images. By choosing a custom location, you can get all the processed files stored in a single folder. Your originals are never touched.

Backups

This is a great safety feature, in my opinion, especially if you are wanting to keep the same file names as the original files. There is no way you can overwrite your original images. Backup copies of the files are placed in an Original Files subfolder in the same folder as each original file. FW will save the new files in the original folder. When selected, you can choose between:

- Overwrite Existing Backups overwrites the previous backup file, so you only have one backup at any time.
- Incremental Backups keeps copies of all the backup files. When you run a new batch process, a number is appended to the end of the filename of the new backup copy. You may find this useful for visual comparisons.

If Backup is deselected, batch processing in the same file format overwrites the original file if the name is the same. However, batch processing in a different file format creates a new file and does not move or delete the original file.

Scripts

Saving your script into the Commands folder on your hard disk adds it to the Commands menu in Fireworks. This way you can access the batch process without even going to File > Batch Process.

The exact location of this folder varies from system to system and depends on whether you want the command to be available just for your user profile or to all users. Commands folders are located in the Configuration folder in the Fireworks application folder and also in your user-specific Fireworks configuration folder.

Batch 'em All!

If you are planning to batch selected files from earlier, just click the Batch but-

ton. If you want to Batch files but have not selected files yet, click the Batch button and you will be prompted to locate files for batch processing.

During the Batch Process, a progress bar and image counter will be displayed. If you have a LOT of images, you may want to go have a coffee. Fireworks does not halt the process if it encounters a problem. It just skips the problem file(s) and tells you at the end there was a snag.

At the end of the batch process, if any of the files added to the batch were not processed, a notification appears that alerts you to the problem.

A log file named FireworksBatchLog. txt is created during the batch process. It lists all of the files processed, the specific files that could not be opened (if any), and other information. You can find this log file at:

- \Documents and Settings\username\ Application Data\Macromedia\ Fireworks 8\FireworksBatchLog.txt (Windows)
- /Users/username/Library/Application Support/Macromedia Fireworks 8/ FireworksBatchLog.txt (Macintosh)

I hope this examination of the Batch Process Wizard has cleared up any uncertainty you had about the feature and that you can see some practical and time-saving uses for it.

Jim Babbage (contributor from CommunityMX) comes from the photographic world, and has spent many years as a professional studio photographer. His involvement with the Web began in the mid-90s when the company he worked for had just gotten online. Born and raised in Toronto, Jim teaches imaging, Web design, and photography at Centennial College's Centre for Creative Communications (www.thecentre. centennialcollege.ca). He is a partner in Newmedia Services (www.nms123.ca), a small communications company, specializing in the things he teaches. He is a regular contributing partner to Community MX (www.communitymx.com), where he's written many articles and tutorials for Fireworks, Dreamweaver, and other general Web topics. He has been a guest speaker at TODCON for several years.
jim.babbage@rogers.com

Intermedia.NET...

Now serving the hottest ColdFusion.

At Intermedia.NET we go beyond the industry standard by supporting the hottest new Coldfusion software, offering power like never before. For nearly a decade, we've been providing reliable, secure hosting to thousands of companies across the globe. We can do the same for you.

Intermedia.NET's premier hosting services include:
- ColdFusion MX hosting
- Competitive plans
- Security sandboxes
- Custom tag registration
- Verity collections search engine
- Guaranteed service levels

**Unprecedented power, unmatched reputation...
Intermedia.NET is your hosting solution.**

INTERMEDIA.NET

Call us at: **1.888.379.7729**
e-mail us at: **sales@intermedia.NET**
Visit us at: **www.intermedia.NET**

News
in Brief

Spry Framework for AJAX Prerelease 1.1 Released on Adobe Labs

Adobe Labs has released the first update to the Spry framework for AJAX. Spry v.1.0 was initially released in the beginning of May.

The Spry framework for AJAX is a JavaScript library for web designers that provides functionality that allows designers to build pages that provide a richer experience for their users. It is designed to bring Ajax to the web design community who can benefit from AJAX, but are not well served by other frameworks.

The first release of the Spry framework is a preview of the data capabilities that enable designers to incorporate XML data into their HTML documents using HTML, CSS, and a minimal amount of JavaScript, without the need for refreshing the entire page. The Spry framework is HTML-centric, and easy to implement for users with basic knowledge of HTML, CSS and JavaScript. The framework was designed such that the markup is simple and the JavaScript is minimal. The Spry framework can be used by anyone who is authoring for the web in their tool of choice.

AdobeLabs said this is just the start of the project. A preview build has been released so that developers have plenty of time to post feedback on what's working for them, and what isn't.

> "The Spry framework is HTML-centric, and easy to implement for users with basic knowledge of HTML, CSS and JavaScript"

CS2 Sales Slowing Down as CS3 Nears, Says PiperJaffray Analyst

"Since Adobe provided its second quarter intra-quarter update on May 2nd indicating that it expects results toward the lower end of guidance based on 'spring break,' investors have been trying to get their arms around causes of weakness in the quarter," PiperJaffray analyst Gene Munster told clients recently.

Munster said NPD data for the first two month's of Adobe's May quarter indicates a slow down in orders for the company's Creative Suite bundle as consumers begin to anticipate the launch of Creative Suite 3.0 in the spring of 2007.

"Based on an analysis of NPD data," he added, "we believe the beginning of a slow down in the Creative Suite prior to CS3 are likely the cause of the company pointing to the low end of guidance for Q2."

PiperJaffray maintains Outperform ratings on Adobe, with as price target of $45.

Flash Professional 9 ActionScript 3.0 Preview

Adobe Flash Professional 9 ActionScript 3.0 Preview provides registered users of Flash Professional 8 with early access to the new ActionScript 3.0 language and the ability to publish to the newly released Flash Player 9. ActionScript 3.0 and the new ActionScript Virtual Machine introduced with Flash Player 9 are among the most signficant advances in the history of Flash. These new advancements, made in Flash Player 9, provide a more robust programming model, achieve standards compliance, and deliver ground-breaking performance improvements.

Simon Horwith Interviews Ben Forta About Flex 2.0, Dreamweaver, and More

Anyone reading Web Developer's & Designer's Journal who for any reason might have missed it to date should take a look at this SYS-CON.TV interview: http://www.sys-con.tv/read/193501.htm.

In it, Adobe evangelist Ben Forta is in full flow, and it's well worth watching.

Getting **Graphic**

Part 1

reat work is being created every day by design firms across the globe. We have contacted a small number of these "insanely great" firms, and present here a portion of some of their work. We hope you enjoy it, are inspired by it, and are encouraged to submit some of your own! Please submit your ideas to editorial@sys-con.com.
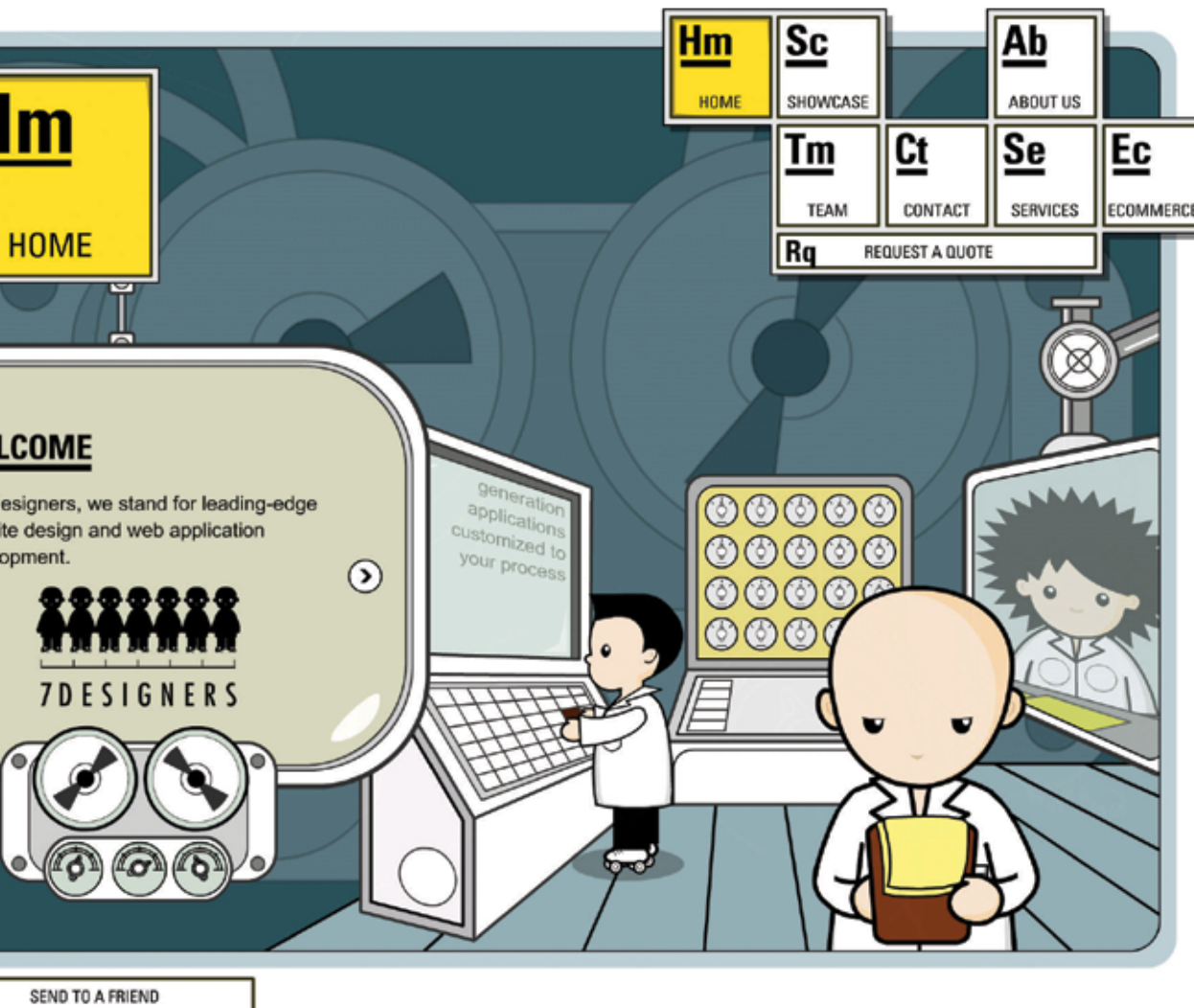
ECommercePartners.net

One hundred years ago Louis Sullivan taught an important lesson to his young architecture student, a promising lad by the name of Frank Lloyd Wright. Sullivan said that in building, design, and architecture, although both are important, "form ever follows function."

Of course, neither Sullivan nor Wright lived beyond the brick-and-mortar era so they had no way of knowing that a century later this famous advice would be equally important for web architecture and building in cyberspace.

Sullivan's lesson, however, was not lost on Asi Erenberg and Gil Levy when they conceptualized then founded the groundbreaking web development firm EcommercePartners.net, way back in 1997. From the beginning the duo understood that generating traffic and attracting interest in online products and services would take more than simply constructing great-looking websites.

Hm HOME Sc SHOWCASE Ab ABOUT US

Tm TEAM Ct CONTACT Se SERVICES Ec ECOMMERCE

Rq REQUEST A QUOTE

click a section to learn more: back to main

creative
strategy
marketing
technology

...vices is designed
...ur business. We
...ology and
... powerful
...ishing to
... online
...is a customized
...usiness optimize
...omers, improve

Ec ECOMMERCE

ECOMMERCE SOLUTIONS

7 Designers offers comprehensive E-Commerce services through its parent organization, EcommercePartners.net

Our market-tested technology offers features and performance required

Sd SEND TO A FRIEND

Erenberg, Levy, and their team believe in employing a holistic approach to web development, judging that many pathways in addition to creative must be traversed simultaneously in order to put a business on the right track to profitability.

Usability, feasibility, traffic, conversion, and redesign are interconnected. All these facets, therefore, must be evaluated and addressed in the precise way that meets the specific and changing needs of each individual enterprise served. This means leaving no stone unturned in the areas of multi-channel marketing (including direct and email, affiliate, banner advertising, and more), SEO copywriting, business and site analysis, and advanced technology.

In the process of devising its proprietary methodologies and growing their own business (an ongoing process – the ECOMMERCEPARTNERS.NET site is itself currently being reworked), ECP realized its creative team wanted their own identity, image, and even website. Voila 7DESIGNERS.COM. The site is a showcase of imagination, expertise, and creativity. It features a charming "staff" of understated anime figures that introduce themselves and show you around while maintaining low Internet weight and fast upload speed. Each page is homepage-quality.

The team at ECP is obviously proud of what they have been able to accomplish. Their soup-to-nuts web development formula can be applied equally well whether the client's field is media or manufacturing, fashion or finance.

In Erenberg's words, "Our job is to build great web businesses, not just websites."

Gigapixel **Creative**

in just three years of operation, Gigapixel Creative, www.gigapixel-creative.com, has amassed 29 international awards for design excellence and has gained recognition by Who's Who in Design and spotlighted by CBS Kips Business Report for its business success.

Founded by two very interesting and dynamic people, Yao-Hui Huang and Joseph Kilrain, Gigapixel has quickly acquired a reputation for thoughtful, daring imaginative work in Web Site development. They have lead the way in solutions for companies seeking to introduce or revamp their branding, marketing or Web presence.

Gigapixel has proven its dexterity in being able to keep pace with this evolving industry by creating designs for a broad range of clients including: magazines (Rave, Seule), MBK Entertainment (Alicia Keys), Pfizer, Remy Martin, PUIG, and Grey Healthcare's GCI Group among others.

What sets Gigapixel apart from other agencies is its involvement in all things creative, which expands into art and film. It is a design agency with a fine arts division, WilKil Art, producing unique meaningful pieces with truly fun gallery shows. WilKil has partnered with international arts group United Creators for European art tours. Gigapixel also sponors The Director's Cut's New York film events helping emerging filmmakers establish a competitive web presence.

Gigapixel is emerging as an industry leader, spearheaded by ingenious technological solutions, innovative web designs and clever marketing concepts. ◢◣

WILDVINE MUSIC

PLAY   PAUSE

A

CONTACT
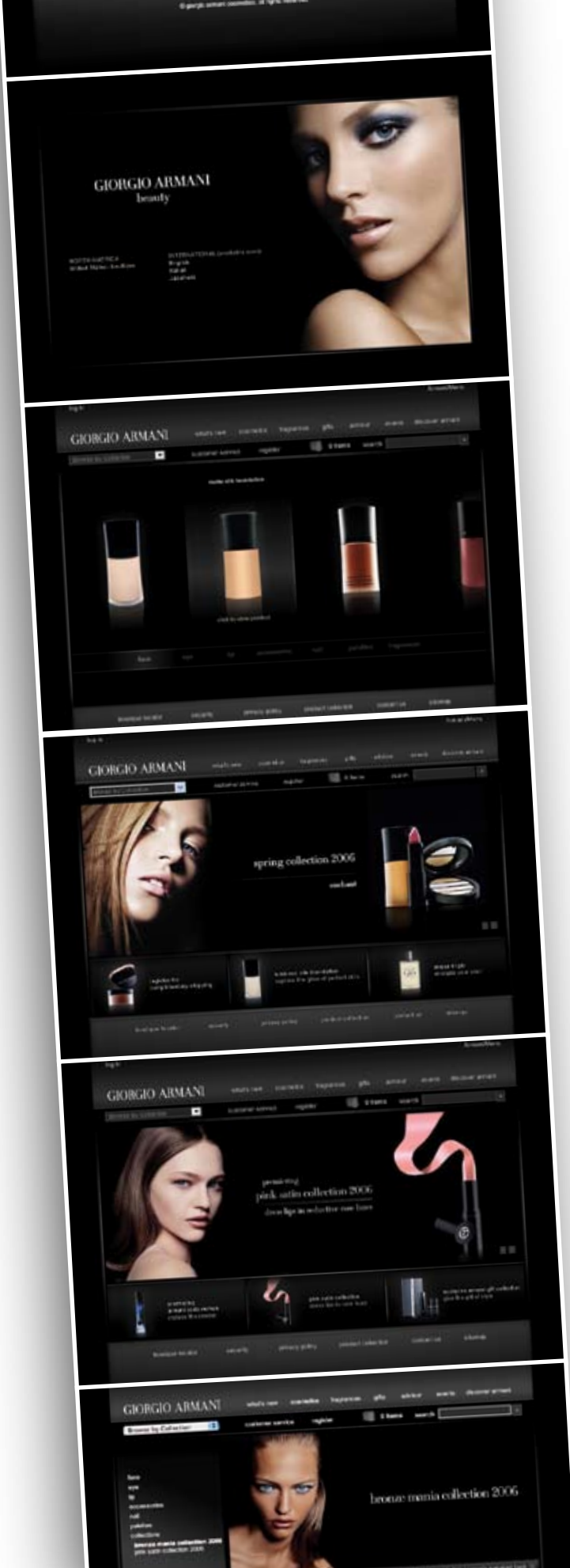
ID **Society**

ID Society is a New York-based inter-active design and marketing agency that specializes in developing stra-tegic online marketing programs that build loyalty and cultivate relationships by extending brands to new audiences. Their passionate focus on the consumer experience sets them apart from the competition, and they are consistently challenged by clients to find ways of acquiring and engaging their customers.

ID Society combines strategic thinking and award-winning creative to increase brand value, as evident in following three recent examples of their work.

ID Society is a leader in developing branded desktop applications, and they recently launched The KEEP 2.0 (www. johnniewalker.com/keep2) for Johnnie Walker. The Keep 2.0 is an innovative application designed to serve as a useful Web tool for consumers while bringing Internet functionality to the desktop.

ID Society devised a new look and feel for the 1800 Tequila website (www.1800tequila.com) that is sophisti-cated and representative of the product as a trade-up brand. All text content within the Flash media was fully indexed by search engines and made available for mobile device browsers.

ID Society helped L'Oreal bring Giorgio Armani fragrances to the Web through Giorgio Armani Beauty (www. giorgioarmanibeauty.com). Giorgio Armani Beauty is a fully functional e-com-merce site that retains the look, feel, and elegance of the Armani brand. The site extends brand loyalty and builds relation-ships with consumers via the Internet.

Insomnia **Creations**

people who choose meaning in life through their own fruition inspire a better world. Insomnia Creations (www.insomniacreations.com) will bring these people together by creating a community of like-minded artists, musicians and filmmakers who wish to contribute, through creativity, multiple perspectives of the human condition.

Capturing human expression is often difficult. Gaining exposure so that others may share in one's artistic endeavor can be even more of a challenge. With a strong community that shares similar values, we believe this can be achieved without sacrificing quality and integrity. The world needs inspired minds to offset the sterility and bleakness often present in today's times.

Through art it is possible to communicate, on many levels, the struggles, feelings, challenges and wonders of life so that human beings may feel connected to each other and embrace the oneness of humanity. By realizing that we are all the same, many barriers can be broken and perhaps a more positive light may illuminate the many challenges of the future throughout the world.

STEVE BLANCO TRIO
CONTACT

1. NORTHBOUND IMAGE
2. BROTHER SONG
3. CIGARETTES
4. URBAN DESCENSION
5. VISION FUGITIVE, OP. 22 NO. 2
6. CONTACT
7. NARDIS
8. THE PINWHEEL
9. WOODS
X. LIFE MODES

ADAM ROBERTS
SUNNY JAIN

spaceunknown

Vocals Aafje van Summeren
Piano Steve Blanco
Bass Adam Roberts

Produced by Steve Blanco
Engineered, Mixed, & Mastered by John F. Hopkins
Zefdik Productions
New York City

Special Thanks

Photography Jeff Baker
Art & Design Louis E Coffari

aafje van summeren *trio*

spaceunknown

Matthew Schwartz
Design Studio

matthew Schwartz Design Studio (www.ms-ds.com) is an award-winning branding and design studio that provides a full-range of creative, marketing, and technology solutions, specializing in logo and corporate identity design, website design and print communications. MSDS works with both leading and emerging businesses across a wide range of industries, emphasizing a goal-directed creative process that combines creative excellence with an intuitive grasp of business.

MSDS develops creative solutions which support and enhance client brands, communicate their value proposition to audiences, and create sustainable competitive advantages. Their work integrates brand strategy, visual communications, interactive strategy and print marketing—so no matter what combination of communication channels their clients leverage, their message is clear and effective.

MSDS works with both Fortune 500 and emerging brands, and has been entrusted to develop brand strategy, design and content for clients like TIAA-CREF, Yahoo!, Extended Stay Hotels and Time Warner. The studio's work has been awarded and profiled by Print Magazine, Communication Arts, The American Design Awards, Graphic Design USA and others. ◢

"To those who visit Spirit and Opportunity through these photographs or one day in person: safe journeys and joyous discoveries."
—From the Foreword by Bill Nye

JIM BELL is an associate professor in the Cornell University Astronomy Department. He is also a frequent contributor to popular astronomy magazines and radio shows. He remains the lead scientist for the Pancam color imaging system on the NASA Mars Exploration Rover (Spirit and Opportunity) missions. He lives in Ithaca, New York.

Jacket design: Matthew Schwartz Design Studio
Jacket photography: Jim Bell, NASA, JPL
Author photo: Courtesy of the author

Dutton
A member of Penguin Group (USA) Inc.
375 Hudson Street, New York, NY 10014
www.penguin.com
Printed in China

VISIT THE SURFACE OF ANOTHER PLANET...

"Wish you were here? I do! These picture post cards of the Martian planetscape perfectly frame the savage beauty of that alien world. And the messages accompanying the images—Jim Bell's informed, impassioned impressions of Mars—enhance the vicarious thrill of this unique travelogue. For an armchair space traveler, here is a fantasy realized."—DAVA SOBEL

JIM BELL

POSTCARDS FROM MARS

CONTENTS

Preface

U.S. $50.00
Can. $65.00

POSTCARDS FROM
MARS
THE FIRST PHOTOGRAPHER
ON THE RED PLANET
JIM BELL

For the first time in the history of life on Earth, we can experience the surfaces of other worlds. This book is a unique window into that awesome achievement.

What became one of the most thrilling of all journeys of the modern space era put the Spirit and Opportunity mobile robots on the surface of Mars with a dazzling array of scientific instruments, including unique stereo panoramic cameras—the culmination of years of engineering research and development. Aboard their solar panel-powered rovers, these cameras were expected to take photographs for about three months. No one imagined that after more than two years these superbly designed robots would still be exploring the plains and mountains of Mars. So far they have sent back over 150,000 images, some taking days to reach us across the tens of millions of miles of space that separate us from our closest planetary neighbor.

Jim Bell was charged at the beginning of the mission with delivering this historic view to the world. Every image went from Mars to Earth and then through his laptop computer before being posted or printed. He has now completed the selection, cropping, and processing of these images, some over 20,000 pixels wide, for presentation in the large-format "book for the ages" that they deserve.

Four of the most breathtaking "hyper-real" panoramas are printed on magnificent 46-inch-wide gatefolds. Also included are photographs from microscopic imagers offering close-up views of the unnervingly strange yet familiar rocks and soil that the *Spirit* and *Opportunity* rovers trekked across. A work that evokes spine-tingling thoughts of our place in the universe in a way human artifacts have never been able to do before, Postcards from Mars is a masterpiece of both art and science.

Studio
Mobile

Studio Mobile, an interactive media agency headquartered in SoHo, New York, boasts a vibrant network of collaborators from seven countries on three continents across the globe. We specialize in interactive and linear screen projects of all sizes for all kinds of industries, taking on all phases of an engagement; from planning and design to implementation and marketing. Our mission is to find the most practical, simple and beautiful solution for our clients, without losing sight of their business objective.

Currently we are involved in two collaborations with Base Design on an Internet project for Excellence Group luxury resorts and a web site for the New York jewelry designer Karen Karch, an animated music video, a top-secret Web 2.0 game, and a book design and illustration project. Our online marketing portfolio includes the successful search engine and display advertising campaign for US Helicopter, whose site, FlyUSH.com, is our most recent launch.

We take great pride in our work and have been widely recognized for our results. To complement and constantly improve the depth and breadth of our offerings (and not get too serious about what we do for a living), we routinely engage in experimental and pro-bono projects. To see our work, play our games and read a bit of news and propaganda, please visit us at ArtByMobile.com.

ASYNCHRONOUS JAVASCRIPT AND XML ASYNCHRONOUS JAVASCRIPT AND XML ASYNCHRONOUS JAVASCRIPT
OUS JAVASCRIPT AND XML ASYNCHRONOUS JAVASCRIPT AND XML ASYNCHRONOUS JAVASCRIPT AND
JAVASCRIPT AND XML ASYNCHRONOUS JAVASCRIPT AND XML ASYNCHRONOUS JAVASCRIPT
ASCRIPT AND XML ASYNCHRONOUS JAVASCRIPT AND XML ASYNCHRONOUS JAVASCRIPT AND XML ASY
RIPT AND XML ASYNCHRONOUS JAVASCRIPT AND XML ASYNCHRONOUS JAVASCRIPT AND XML ASY
ND XML ASYNCHRONOUS JAVASCRIPT AND XML ASYNCHRONOUS JAVASCRIPT AND XML ASYNCHRON

Rich Internet Applications: AJAX,

www.AjaxWorldExpo.com

AJAXWORLD™
CONFERENCE & EXPO

SANTA CLARA SILICON VALLEY

SYS-CON Events is proud to announce the first-ever AjaxWorld Conference & Expo 2006!

The world-beating Conference program will provide developers and IT managers alike with comprehensive information and insight into the biggest paradigm shift in website design, development, and deployment since the invention of the World Wide Web itself a decade ago.

The terms on everyone's lips this year include "AJAX," "Web 2.0" and "Rich Internet Applications." All of these themes play an integral role at AjaxWorld. So, anyone involved with business-critical web applications that recognize the importance of the user experience needs to attend this uniquely timely conference – especially the web designers and developers building those experiences, and those who manage them.

CALL FOR PAPERS NOW OPEN!

We are interested in receiving original speaking proposals for this event from i-Technology professionals. Speakers will be chosen from the co-existing worlds of both commercial software and open source. Delegates will be interested learn about a wide range of RIA topics that can help them achieve business value.

MXML vs
ActionScript 3

Building custom AS3 components
by Jeff Tapper

'I've been building a bunch of custom AS3 components for clients lately, and have run across the need to use view states within an AS3 component.

Working with states in MXML is pretty trivial, using the AddChild, RemoveChild and SetProperty tags, you can do virtually anything you need, but when working in an AS3 only environment, it becomes a bit trickier, since there are no tags. Of course, anyone who has worked with Flex for any length of time knows that MXML tags are interpreted into AS classes before the application is compiled into a SWF, so anything you can do in a tag, you can also do with pure AS.

I was looking to do the AS3 equivalent of this:

```
<mx:states>

  <mx:State name="minimized">

    <mx:SetProperty target="{this}"
property="height" value="{this.getStyl
e('headerHeight')+15)}"/>

    <mx:SetProperty target="{this}"
property="width" value="{this.min-
Width}"/>

    <mx:SetProperty target="{this}"
property="vScrollPolicy" value="off"/>

    <mx:SetProperty target="{this}"
property="hScrollPolicy" value="off"/>

  </mx:State>

</mx:states>
```

Here is my AS3 to do the same thing:

```
private function buildStates():void{
    var overrides:Array = new Array();
    var newState:State = new State();
    overrides.push(makeSetProp(this,"
height",this.getStyle("headerHeight"
)+5));
    overrides.push(makeSetProp(this,"wi
dth",this.minWidth));
    overrides.push(makeSetProp(this,"vS
crollPolicy","off"));
    overrides.push(makeSetProp(this,"hS
crollPolicy","off"));
    newState.name="minimized";
    newState.overrides = overrides;
    this.states = new Array(newState);
}
private function makeSetProp(target:
UIComponent, property:String,
value:*):SetProperty{
    var sp:SetProperty = new
SetProperty();
    sp.target = target;
    sp.property = property;
    sp.value = value;
    return sp;
}
```

Essentially what we have is that each UIComponent has a property called states, which holds an array mx.states.State instances. Each State has an array of things to override, called "overrides." In this case, each of the overrides is a SetProperty, although, it could just as easily be AddChild or RemoveChild.

Jeff Tapper is chief technologist of Tapper.net Consulting and a member of the Editorial Board of Web Developer's & Designer's Journal. jeff@tapper.net

Advertising **Index**

STREAM57

Customized Flash-based media solutions
Software and services for collaboration, video conferencing, and e-learning

Other companies in this magazine spent a lot of time on pretty ads. As you can see, we did not. We spent our time hiring the best people and training them to deliver outstanding support for your website. We spent our time building a state of the art datacenter and staffing it with people who care about your website like it's their own. Compassion, respect, credibility, ownership, reliability, "never say no," and exceed expectations are words that describe our service philosophy. From the first time you interact with us, you'll see what a difference it really makes. And you'll also forgive us for not having a pretty ad.

HostMySite.com

WEB HOSTING • MANAGED DEDICATED SERVERS • COLOCATION • VPS • ECOMMERCE • BLOGGING • EMAIL