



Innovative Ideas from the "Rich Media for Business" Experts

## CommuniGate's Pronto! Client Opens Up the Communication Senses!

by Jon Doyle

When communicating with others, we all rely greatly on our visual sense. During a phone conversation, for example, have you ever wanted to see the other person's expressions when they said something or heard some news? We've found that the visually energetic delivery of messages in business, such as from a CEO, is very desirable. Such capability is also welcomed among consumers for intimate communications between family members. Multimedia Messaging, or MMS, is very popular to send a quick video, often laden with emotion, like a birthday greeting, or where you have caught a "moment" with your mobile's cam, and you want to share that with people.

Modern communications is increasingly a hybrid, capable of multi-channel connections between people such as phone + IM, or video + audio, involving multiple senses. You see it on the Web, with Flash technologies, or in support centers where you can chat with the technicians live. Rich Media Communications delivery is highly visual and uses multimedia to stimulate more than one of our senses. According to the Wikipedia, Rich Media is interactive

multimedia, but we like to think of Rich

Media here at CommuniGate Systems as

taking a media type to a higher level.

However, if multimedia is too difficult to use or not really beneficial, such as a disruption in the work place, what good is it, other than a nice distraction? Rich Media can appear in simple things such as talking on the phone while IM'ing others, often times to get info on how to answer things we might not know at that moment. But by taking Rich Media and making it fit a business process or a consumer lifestyle, things really get interesting.

If you look at how people work in most offices, you will find a dashboard for their email and scheduling, maybe Outlook, but you will also see IM clients, and music clients such as iTunes or Windows Media Player. We have become very dependent upon our email and scheduling over time. In fact, the calendar application itself produces a lot of traffic these days involving invites, acceptance notices, attachments, updates to meetings, and notes containing PIN codes for conferences. In fact, most of the business communications have become all wrapped up in that client, Outlook.

> When we at CommuniGate Systems began development of our new concept of a client framework, it was not to just make another Outlook, but bring Rich Media into users' hands. We set out to not just dump a lot of

new features on the desktop, but design a framework that becomes a client-side application server. You probably have heard of applications servers, but a client, which can run applications designed to fit organizational or individual requirements, is quite unique. We called this new framework Pronto!, and we built this in Adobe's Flex2 technology for Flash players.

We of course needed our new client application server to have excellent integration of the fundamentals such as email and calendaring, but the basic concept was to create a client that brings together all of the new forms of communications elegantly, whereby all forms of IP communications can be accessed via one address (name@domain.com) any place and any time. I like to think of Pronto! as what comes next or in the post-Outlook era, rather than being just "old wine in new bottles". Pronto! needed to be able to serve up interesting applications like IM and Presence, but hook into the existing calendar functions, so you can see a person's presence, and perhaps IM them quickly before you make an appointment. Or, have the calendar decide when calls can ring my devices; am I in an appointment? Is the caller an important person that can barge in or be redirected to a colleague?

Think about how we work today. Many of us like to play music while we work - this is not really anything new, but think about that music being available in the client, no matter where you are logged on. Another interesting application we see a lot of these days is blogs. What if that info were also in the same client, and I could drag music up to the blog and make it available anyplace? It starts to become really useful if I am sitting and listening to a seminar speech, and that blog is available through my



mobile, with the same Flash client, and I can update it in real time. Or, as I walk out of a seminar, I see a friend, and decide to Bluetooth him over a few of those songs, from the same client.

I don't know about you, but I tend to be connected a lot, either by the computer or the mobile I carry. But many of us also manage to have some time available in the day to watch TV. What if that same communications client were available in the set-top box? What if I could see phone calls as they come in to me, and decide whether or not to answer them? Would that not be pretty nice to hear in my surround

sound system? Well, perhaps my wife would not like that so much, so instead I could decide to retrieve that call on my mobile and step out of the room. These examples demonstrate that our means of communications need to be more fluid, and not constrained to one particular network or the other. The buzz word for this is FMC, or fixed-mobile convergence. My lifestyle is such that I roam between fixed lines, such as DSL and my LAN at work, to wireless, and then sometimes to cable networks.

We built Pronto! using Adobe's Flash for a variety of reasons, among them security and portability, as I have shown, but most importantly because of its multimedia capabilities. The ability to see a person in a static video, or a videoconference, or even in IPTV, is all about different usage types of Rich Media. Having the right client architecture unlocks the

real capabilities of communications for different lifestyles and business needs.

Have a look at Pronto yourself, or download a free 5-user copy and run it today - www.communigate.com/pronto/

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## Choosing the Best Technology for Rich Internet Applications

By Jeff Whatcott, Vice President, Product Marketing, Enterprise & Developer Business Unit, Adobe Systems

While Internet-based applications have brought benefits to businesses and consumers alike, the actual experience of interacting with many Web-based applications leaves much to be desired, especially when compared with the richness and usability of the best desktop applications.

For consumer-oriented applications, the Web's page-based model and lack of client-side intelligence can make even simple transactions confusing and error prone. As a result, online businesses are losing millions of dollars to abandoned shopping carts or costly customer service calls.

For business applications, the problem is particularly acute. The Web deployment model has allowed IT organizations to reduce the cost of software deployment, but it has created a community of underserved business users wanting to return to the usability and responsiveness of desktop and client/server applications. As a result, businesses are losing millions of dollars per year due to low productivity or poor decisions.

Why is this happening? Ultimately, the demand to build applications of increasing complexity has outpaced capabilities in traditional Web browsers. IT professionals are realizing that traditional Web browsers are the Achilles heel of today's SOA strategies. Browsers cannot connect natively to Web services or interact with message-based data. They are also OS dependent, making software development and testing extremely arduous and time-consuming.

Forward-looking IT professionals are turning their attention to design patterns

and technologies that can improve the client side of the equation. And now, we are seeing widespread deployment of rich Internet applications (RIAs) that combine the responsiveness and interactivity of desktop applications with the broad reach and ease of distribution of the Web.

IT professionals and developers have a wealth of resources with which to design RIAs, including Flex, Ajax, Silverlight, XUL, JavaFX, etc. Any of these technologies demo well and will work for 'good enough' RIAs that incrementally improve the user experience for a limited audience. More and more developers, however, are embracing Adobe Flex once they reach the limitations of the other options but require more richness and broader reach.

Flex is already being used by thousands of organizations for delivering RIAs across the enterprise and over the Web to deliver interactive data dashboards, customer and employee self-service applications, online product selectors and configurators, and business-to-business applications.

Applications delivered with Flex offer a better experience because they take advantage of the browser and Flash Player runtime. Installed on over 97 percent of Internet-connected PCs, Flash Player provides a consistent, cross-platform runtime that combines a high-perform-

ance virtual machine with integrated support for multilingual text display, printing, data manipulation, motion, and multimedia. On top of these capabilities, the Flex framework layers a rich set of user interface components and design principles that encapsulate best practices in interaction design and usability.

Flex provides a highly productive development model that easily integrates with existing processes and is based on standards and best practices that have emerged over the last decade of Internet development. The Flex development model uses XML for user interface design and layout and an implementation of ECMAScript (JavaScript) for client logic. The Flex Builder integrated development environment (IDE) provides a robust set of coding, debugging, and visual user interface layout tools that shorten the learning curve for new developers and easily integrate with existing source code management systems. In addition, Flex provides integrated support for unit testing and automated functional testing tools.

And because Flash technology leverages SSL and authentication technologies and requires no changes to access control or other security settings, organizations do not need to deploy additional security solutions when embracing Flex-based applications.

The end result is a streamlined, intuitive way to design and deploy applications that dramatically improve how businesses engage with people, processes, and information.