



# Developing New Applications for Network Operators with CommuniGate's Pronto!



CommuniGate Systems ([www.communiGate.com](http://www.communiGate.com)) of Mill Valley, California, is well known for their carrier-class Internet Communications software for broadband and mobile service providers, enterprises and OEM partners. Indeed, over 130 million subscribers (including 47 million voice subscribers) rely on CommuniGate's products.

One of CommuniGate's most exciting achievements of late is a new, extremely flexible, extensible interface client software called Pronto!, enabling network operators, service providers and even enterprises to develop Mobile Rich Media Internet communications

Jon Doyle, CommuniGate's Vice President of Business Development, says, "Today's Pronto! has a user interface with tabs linking to all of the applications you'd expect, such as messaging, Voice-over-IP, scheduling, RSS feeds, managing a website and a blog, pretty much all of the things we do in our daily lives on our PC. But if customers get bored and operators want new applications? We've enabled an ActionScript API where people can write any sort of plug-in and develop these applications to suit or have us help them. If a network operator or service provider needs to extend Pronto! and add some new functionality - for example, a shopping cart to buy MP3s like you do with iTunes - the operator can develop a shopping cart module and insert that into the Pronto! framework. Users logging in would now see their usual tabs and functionality plus the shopping cart tab for music and an offer to subscribe to it. That's why I like to describe Pronto! as probably the first example of a client application server on the market. Most of us are familiar with applications servers inside of a datacenter sitting on a server, but here we're talking about an application server that will be running in client software on a desktop, a mobile device or even in a set-top box or cable modem."

CommuniGate's remarkable Pronto! user interface gets its flexibility from the underlying technology used to create it, Adobe's Macromedia Flash-based Adobe®

Flex™ 2. Pronto!, developed in Flex2 is a Rich Internet Application framework, running on any Flash9 player that delivers true convergence by integrating collaboration and messaging with Rich Media such as VoIP, IM and Presence for access by anyone, anywhere, anytime. Users can access all forms of Internet communications as well as all their stored data from business information to video and voicemail from any browser without installing any new software.

Pronto! connects to the CommuniGate Pro Internet Communications platform via the XIMSS API (XML Interface for Messaging, Scheduling, and Signaling), which permits rapid development of lightweight clients and interfaces that can call upon web and XML capabilities or skill sets. XIMSS enables Broadband and Mobile operators to quickly design user interfaces, build portals, interface with broadband modems, or link to external applications and services without the need for complicated protocols.

As Doyle says, "The value proposition behind this is that network operators want to deploy IMS-based applications and it seems it's been taking a long time for one to appear. Many operators boast about their new NGN infrastructure, but what the operators are looking for are very lightweight, flexible applications deployable in large quantity, to various types of subscribers, and we believe that the Pronto! framework is the best example of how to do that."

"Pronto! is written in Flex 2, a cross-platform development environment based on Adobe Flash for creating Internet applications that run identically on all major browsers and operating systems," says Doyle. "The Pronto! API, or what a developer writes to, is called the ActionScript API. A very large developer community writes software in Flex today. For example, look at what MobiTV is doing with Flash; they're a company that's sending IPTV out to mobile handsets. Then there's The ZON Network from Verizon, an ecosystem that brings together Flash developers to deliver content and applications inside of the Verizon network. A third area that has been very strong has appeared in Japan with the KDDI and DoCoMo developer communities. They've produced many games over the past few years using Flash technology."

"Games are just one example," says Doyle, "Another is content, such as ring tones and MMS [Multimedia Messaging Service] movies.

"So, network operators running the Pronto! Flex framework can tap into these large developer communities," says Doyle. "It's similar to what happens with application servers on the server side, where you have three big developer communities working on things that run on application servers from BEA, IBM WebSphere and Oracle. And now we have a technology where people can tap into a client-side applications server and plug in different types of functions accessible by a user like you or I. That's important because carriers want to deliver specific things to users on the client side, via web delivery and they don't want it to matter whether the client is running on a desktop or a mobile handset. They simply want to put revenue-generating applications in our hands without having to endure the bothersome affair of installing things inside our home or business PCs. It's much easier to deliver applications through a web-based framework. They just snap into our Pronto! framework and run."

"Flash-based technologies are very compelling for various reasons," says Doyle, "mostly relating to security and especially portability. You can run a Flex application wherever there's a Flash player, and Flash just happens to be the most ubiquitous software delivery agent in the world today, with more than one billion Flash player installations worldwide. As a delivery mechanism, Flash reaches far more people than Microsoft can with its Office package or new Silverlight™ cross-browser, cross-platform plug-in. So, many developers are working on so-called Rich Internet Applications (RIAs) for the Flash/Flex 2 environment. Our Pronto! is basically an RIA that also has an API so that you can develop your own application and plug them in into Pronto!. We're essentially shipping a foundation."

Aside from operators and service providers, a large enterprise with its own staff could even write site-specific applications for itself, such as things for workflow management or CRM extension, say address books or click-to-call actions.

To get an idea of what you can do with Pronto! and the CommuniGate Pro communications server, go get a free live account from CommuniGate Systems at [www.TalktoIP.com](http://www.TalktoIP.com). You can then send and receive email and manage media, all using the Pronto! interface. It's free, with no advertising, but that version's storage capacity is limited, at least for now.

"Even so, you can store your music there," says Doyle, "and eventually we'll expand the site to include video capabilities, telephony and many other interesting things."

*Richard Grigonis is Executive Editor of TMC's IP Communications Group.*

## Tap into Flash Application Content

*by Jon Doyle, CommuniGate Systems*

Many of the operators I speak with are seeking out the mystical "IMS Application" that will help drive new forms of revenues and pay for investments in their NGN technologies of years past. Delivery of Rich Media to mobile handsets and the desktop is very much a tangible and viable strategy today. Many of the operators in Japan, but also Verizon in the U.S. have embraced Flash & Flash Lite technology and developed communities where hundreds of games and other interesting content are available.

Most Mobile operators I talk with have a wide range of subscriber types in their network: consumers, business people, kids, grandparents, etc. They find it quite challenging to test or sample new applications. Our modular client framework provides the best solution on the market today to address these subscriber bases. We leverage Flash technology because of its widespread installed platform, the Flash Player. In fact, this is the most widely-deployed platform in the world, and is ideal for Rich Internet Applications (RIAs) such as our Pronto! framework. Why is this important for operators and IMS? With it, any set of applications can be "snapped" into our framework and quickly deployed on either wireline or mobile networks.

Let's look at some media, Flash Games for example. This type of content is very popular

with consumer subscriber bases, and can drive not just use of the app itself, but also traffic on the network and storage. A simple shopping cart within the Pronto! framework takes care of the games' delivery, but leveraging the chat and communication tools within Pronto! drives usage models, and storage of the games in the libraries drives stickiness to the operator's network. Our framework can handle not only any sort of simple content like Music, or Video, but even more interesting applications like dating services that interact with the core Pronto! services, or sophisticated operator location-based services. All of these applications will now have a very short time-to-market thanks to the flexible nature of the Pronto! framework.

There are many large communities already in the market with applications and content based on Flash. Linkage to the operator's network and subscriber base demands technology that is flexible and can scale to changing needs. CommuniGate Pro is the most powerful communications platform with the right client technology for operators that have adopted convergence of network topologies. Sign up for a free account at [www.TalktoIP.com](http://www.TalktoIP.com) and see how delivery of content and Rich Media can be used in your business to build out a next-generation subscriber base community today.