CommuniGate SYSTEMS

Network Operator Trends and Opportunities

By Richard "Zippy" Grigonis

Service providers, Mobile carriers and other broadband network operators continually search for new and exciting services to attract and hold subscribers. Since 1991, CommuniGate Systems (www.communigate.com) of Mill Valley, California, has been the acknowledged leader of developing scalable, feature-laden solutions for the Internet Communications industry.

CommuniGate's VP of Business Development, Jon R. Doyle, says that his company's expertise is based on its long experience dealing with network operators around the globe that demand services which create revenue with a new idea of combining Internet Communications technology with traditional business operational services."

"We encounter and work with all kinds of operators in Japan, Brazil, Sweden, Turkey, Russia, Netherlands, you name it," says Doyle. "We've gathered and shared a wealth of information about the market as a whole. It's almost as if we're a market research company. And this in turn enables us to leverage innovative ideas for applications which carriers need to build up their portfolios and what the operators can do to cope with market changes."

"For example, the growing trend toward commoditization network access and toll-based business models can be found everywhere in this industry," says Doyle. "Let's take a provider or carrier such as AT&T, but it could be KDDI, or Tele2. They used to be

a telephone company, then they became a DSL-and-telephone company. They do $85 billion in business a year, with the lion's share of that money coming from 'minutes' or "toll-based" traffic — billing for how long people talk on the phone to some "location". But once DSL is installed in your home and mine, we can talk together over the Internet because we've paid for that DSL connection to the "network" for a flat fee. That's a big dilemma for a big carrier such as AT&T, where most of their revenue isn't coming from the DSL connection, but from the minutes spent by people talking on their house phones. Adding to that, AT&T and others also have the same dilemma on their "wireless network" for mobile phones, as those fees for traffic become flat. So, what will happen over time, as AT&T has 100 million subscribers, nearly 1/3 of the U.S. population, and begins to use the new "Unity" service? Seems per minute fees will become less and less a part of a carriers' business model but new services or Rich Media Internet Communications will drive revenues on the consumer side, and value-add services like scheduling and mobility for the business subscribers."

"What does this mean for the future?" asks Doyle. "Everything is just racing to a price of near zero for toll and location-based services like voice calls. My hypothesis is that big carriers will have to start delivering rich applications attractive to consumers like you and me, as well as businesses. That's why we

at CommuniGate Systems develop Rich Media Applications for providers, as we know that infrastructure and connectivity-based services will become a commodity far more quickly than what happened to email."

"There are two different types of customers," says Doyle. "To start with, let's say you and I are customers of AT&T and we're consumers. There are things that you and I can pay for on that network above and beyond the DSL connection, such as ring tones, sharing music files, movie files, and in particular pay per view [PPV], because the connectivity will be fast enough so that movies can be streamed to you at home. Then there are community-based games where people on the network can share and use the game together — that will be a new revenue stream in the future as broadband itself becomes commoditized."

"On the business side, if you're buying broadband from a provider, what are the applications that you would be willing to pay for?" asks Doyle. "Our argument is that such applications must be very tailored applications for the business environment or processes. We've done a lot of research on four distinct enterprise segments: medical offices, dental offices, law firms and architectural/graphic arts studios. We sampled around San Francisco and Los Angeles and talked to these businesses and asked them, 'What are some of the things that would be beneficial to you VoIP-wise?' As it happens, it definitely wasn't cheap phone calls or tossing their PBX out the window. They told us they needed applications that fit into their business model or their business practice. Two examples: Law firms generally bill clients for phone time spent on their behalf. Thus, they want applications that tie the VoIP system into their billing applications. When a lawyer talks to someone, the system must look at the Caller ID, automatically register how many minutes have gone by and put that information into some kind of database Legal Industry-specific application so the client can be billed."

Doyle continues: "When we asked the medical offices about VoIP, they said it sounded nice to have free and/or cheap phone calls but they were very skeptical. They thought it would be disruptive, necessitating them getting rid of their PBX, installing other stuff, and doing it all with-

out a big IT department. They didn't see a lot of business value in it. The application they really found interesting was patient scheduling. Smaller medical practice offices spend a lot of time scheduling appointments with patients, who often forget about their appointments, so the schedule has to be redone and/or the patient must be found. It's a headache. So we designed an application for them where patients can go to a website and self-service themselves. They can find available appointment times and create their own appointments with the medical office. We also integrated the application with VoIP, so that application will see all of tomorrow's appointments and it can place reminder phone calls for those appointments. It'll play a prompt over the phone such as, 'Jessica, you have an appointment tomorrow morning at 9 a.m. Press 1 to keep it, press 2 to cancel it, or press 3 to speak to a representative'."

"The medical people saw immediate value in it," says Doyle. "It turned the whole conversation around from, 'VoIP doesn't seem so interesting to us,' to 'Wow, that's a powerful application that can fit into my business process'."

"We have also developed Rich Media applications for mobile operators," says Doyle. "Whether you're a consumer or a business subscriber, you're going to want the same content and rich media capabilities in your handset when you walk away from your desktop. Again, these telecom companies are evolving from just being connectivity providers — selling you a connection and charging you for minutes using it — to become communications providers and application providers. We help providers by placing our application server platform in their data center and then they package it and sell it for a set fee into their subscriber base. It's basically like a channel relationship. We're a software company, we don't host the hardware ourselves. Our subscription models make it much easier for ISPs and carriers to deploy these services, because they don't need a lot of capital or expenditures up front. As they sell the service to their subscribers, they can pay us a royalty or monthly fee." **IT**

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

Mobile Rich Media Internet Communications Drives Customer Loyalty and Subscriber Base Expansion

By Jon R. Doyle, VP of Business Development, CommuniGate Systems

As IDC stated in a recent article (http://vendor.tekrati.com/research/news.asp?id=8331), mobile services, applications and devices continue to be one of the most rapidly evolving areas of communications, content, entertainment, and enterprise connectivity. We already see mobile handsets with SIP clients and WiFi transceivers for VoIP and IM. A great example of this is in the Nokia handsets for business users, but also in the Danger devices which are the rage for consumer populations in the age group of 15-23 years. Mobility will simply be what we grow into over the next decade in technology but also in devices. So does the carrier sell technology or applications? Making the life of the subscriber easier is the answer.

First, the whole notion of Internet Communications speaks to Mobility and portability. Think about how DNS and email works, and apply that principle to voice communications. The address space of Internet Communications is user@domain, and it has no distinction or concept of toll or location like telephony has. In telephony, my phone number is based on some city or town, and where I call is calculated based on their number to derive a toll, or "cost per minute". All of that goes away in Internet Communications, because where I am, and what device I have, is irrelevant, as is the person or device with which I am calling or communicating. The devices simply register, and can be mobile all the time or sometimes. An example to visualize this: I have a home computer running with my server, in this case CommuniGate Pro. It is configured with my domain, and I have a phone, a Polycom, "registered" to it, which actually is physically located in my sister's house in Burbank. I also have a laptop, on which I have a softclient also registered to that same server. When my sister calls me, my laptop could be anyplace. I also have an apartment in Sao Paulo; there I have a Sipura box and my cordless phone, also registered to this server located here. So, when people call me, that line also rings, or when I am there and call my sister here in California, they have no idea, unless I tell them, where I might be calling from.

So, mobility is already built into Internet Communications, with the DNS address space. In my example above, my address is user@domain, and communications for me are IM, VoIP, email or presence info. Now, devices also will become much more flexible as we add IPv6, and mobile handsets will register no matter where they are or on what network. Think about paying one fee, as you do for DSL or other types of broadband; you get some devices, hard phones, softphones, mobile handsets, and no matter where you are or who you call, it is all built into that one fee. Sounds far-fetched? Well, think about how email works today!

At CommuniGate Systems we are pushing with contributions to various associations for open standards and true mobile Internet Communications to empower the worldwide 2 billion email accounts to full IP Communications with email, Instant Messaging, VoIP, collaboration and freedom of devices. Our Flash-based client Pronto! enables users with mobility for all such today. A free copy of CommuniGate Pro Community Edition can be downloaded at **www.communigate.com**.