

Next Exit: Cloud *CHR Builds the Fast Lane to Cloud Computing*

By Jesse Cryderman

Ask any “man on the street” how many phone companies he can name, and you’ll probably end up with a list that you can count on one hand. But as anyone working in telecommunications knows, that’s hardly representative. Still, how many smaller communications service providers (CSPs) are operating in the United States?

You might be surprised to learn that there are roughly 1400 Tier 2 and Tier 3 communications service providers distributed throughout the United States, most in rural locales, and they’re all facing considerable challenges. Competitive, regulatory, and technological burdens have placed increasing pressure on rural service providers, which necessitates changes in operations as well as back-office strategy. Outsourced operations and managed services are especially attractive to these smaller CSPs, as they might not have the capital to invest in an advanced customer relations portal, a converged billing platform, or an LTE network build out, for instance.

That’s where Houston-based CHR Solutions steps in. The company has maintained a dominant market position with Tier 2 and Tier 3 CSPs for over 60 years, serving more than 900 U.S. telephone companies, Internet companies, cable TV providers and wireless (Cellular, PCS and Wireless ISP) companies. This extensive experience in the Tier2/3 market is key to CHR’s success. Rural telcos have multi-generational relationships with the communities they service and understand their customer base in ways that multi-



An inside peak at CHR’s Network Operations Center (NOC) in Houston.



national conglomerates simply cannot. This unique, multi-decade kinship mirrors the relationship CHR has with its CSP customers.

The world is changing, however, and a business once dominated by copper lines and rotary phones is being replaced by packet-driven, high-speed terrestrial and mobile broadband networks, and the advanced service offerings they enable. How is CHR enabling rural CSPs to maintain their identity and improve their margins in a world that’s moving at 4G speeds?

The Platform of the Future

Marc Hayden, executive vice president of sales, marketing, and product management, succinctly defines CHR Solutions as a “Network Enabler,” and looking at the wide range of services the company offers—everything from software, systems integration, and network engineering to accounting and compliance—this is an accurate moniker.

“We help telcos identify the pieces necessary to build the network, how to monetize the network, and how to build the enhanced services platform of the future,” explained Hayden.

What is that platform of the future? “It’s the cloud,” said CEO James Taylor, while pointing to a whiteboard drawing of a cloud delivering services to myriad customers and creating revenue in all directions.

During a recent trip to CHR headquarters in Houston, I quickly learned his enthusiasm and energy for this future is contagious. “CHR enables the Tier 2/3 market to get into offering cloud services without the CapEx,” he summarized. “The Tier 2/3 market can leverage our cloud-based applications and services to generate new offerings that are integrated to their billing system and automatically provisioned to their customers.”

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Creating Revenue in the Cloud

Lowering costs is an important strategy for CSPs, but creating new revenue over the long-term is paramount. CHR aims to kill two birds with one stone. Fredel Thomas, director of product management, explained, "A cloud service is not just the ability to reduce operating expense. At CHR, we focus on both reducing operational costs and creating new revenue streams for our clients via the cloud."

"For example, we offer productivity solutions that enable our clients' small to medium business (SMB) customers to reduce their operational costs," continued Thomas. "At the same time, our clients can both reduce their own operational costs by driving their enterprise applications through our cloud and create new revenue streams by offering new suites of business applications and services to their SMB customers. It's a win-win for clients."

The CHR Cloud Apps and Services offerings include:

- Hosted Exchange
- Hosted Sharepoint
- Hosted Servers
- Web Hosting
- Backup Solutions

The very nature of the cloud, though, makes the service offerings and their concomitant revenue opportunities limited only by the imagination. After

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touring CHR's NOC and data center, James Taylor nearly ran out of ink while illuminating all of the possible points for monetization along a cloud-enabled path.

Safest Cloud in the Sky

As we have discussed throughout this issue, there are numerous cloud offerings in the marketplace, but not all clouds are the same.

Public clouds have cost benefits, but performance can vary wildly. "When a provider leverages a public cloud to host their application, they have no way of knowing what other applications are being run in that shared environment," said Fredel Thomas. "The risk is when someone else's application becomes so heavily used by users that it affects the performance of your application because of the shared infrastructure."

These risks are enough for many businesses to shy away from the cloud. This is where the CHR private cloud solution comes into play. "At CHR, we actually eliminate this risk by offering a private cloud backed with detailed service level agreements (SLAs) not

The image shows a banner for CHR Solutions. On the left is the logo, which consists of the letters "CHR" in a bold, sans-serif font, followed by a blue circular graphic with three curved lines inside, and the word "Solutions" in a smaller, italicized sans-serif font. Below the logo, the text "click to make cloud a REALITY" is displayed in a large, bold, sans-serif font, with "REALITY" in a significantly larger size and a different shade of blue. In the bottom right corner, there is a dark blue rectangular box containing the text "CHR Solutions .com" in white, with ".com" on a separate line below "CHR Solutions".

only on the infrastructure side, but on the access side as well,” continued Thomas. “Meaning, a client’s applications are supported end-to-end regardless of what other applications are running in CHR’s cloud environment. This level of SLA is critical so that our clients never have to worry about the performance of their apps being affected by other apps being hosted in our cloud.”

When I visited their NOC in Houston, I also learned that CHR also employs advanced, proactive monitoring of their cloud environment to detect and address any issues that could affect performance levels before they impact the environment.

Let’s Get Physical

As everyone working in IT knows, virtual security only goes so far. How good is encrypted authentication and redundancy if the power goes out by natural or manmade disaster? When I visited CHR’s facilities in Houston, I was impressed by the level of physical security and disaster recovery. Every possible scenario had been given considerable thought. From an infrastructure perspective, everything was redundant—from the back-up power to the HVAC. Even the location of CHR’s critical facilities within their building makes it the least likely to sustain damage in the event of a hurricane.

For CSPs, the Automated Cloud is the Future



CEO James Taylor isn’t afraid to get his hands dirty in order to build a closer relationship with his customers and learn of their needs on a personal level. Here he is grilling food for clients in Alaska.

As we’ve seen, offloading IT costs to a cloud environment can enable companies to reap substantial savings, but enabling CSPs to automatically create, market, and provision their own catalogs of services they can offer to their business clients is the onramp to the future.

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“The future goal for CSPs will be their ability to offer a productivity suite that enables SMBs to fulfill their IT business requirements without the CapEx exposure,” explained Marc Hayden. “The ideal scenario would be the ability for a SMB to self-provision their connectivity and IT requirements online via the CSP’s website. Whether it is the availability of PBX, IPTV, VoIP, productivity needs, or billing, the end goal is to enable self-management of these IT requirements.”

Not only has CHR built this onramp, it has secured federal funding for rural CSPs to take advantage of these new opportunities; grant writing is part of CHR’s extensive experience. The National Broadband Fund has released about \$900 million in funding so far for rural operators.

“We wrote the grant request for 60 percent of the telcos, and 100 percent of the requests were granted,” Hayden says.

Full-Service Enabling Self-Service

CHR Solutions offers a full suite of solutions for CSPs that allows them to transform their business from phone companies to self-service smart vendors of the future. By leveraging the CHR cloud environment, Tier 2/3 telcos can make this transition in a rapid, cost-effective manner, all the while maintaining that most valuable competitive differentiator they have: their long-standing relationships with their customers.

About CHR Solutions

CHR Solutions enables communications service providers around the world to grow revenue, reduce cost, improve operations, manage risk, and align technology. For over 60 years, CHR has maintained a dominant market position with Tier 2/3 service providers, and today CHR is the largest provider of services and solutions to the rural telecommunications market, serving more than 900 U.S. telephone companies, Internet companies, cable TV providers and wireless (Cellular, PCS and Wireless ISP) companies. For more information, visit:

www.chrsolutions.com