

Availability of Multi-Service OSS Challenges Carriers to Act Faster

Results Speak for Themselves as Home-Grown Platforms Embraced by SaskTel Gain Wider Currency

BY FRED DAWSON

It may take awhile, but it's clear that the tools are at hand to help telcos overcome the obstacles to cutting costs and generating new revenues posed by the disjointed array of billing, provisioning, service assurance and other legacy elements of back office operations.

Beyond marketing hype, operations support system vendors are making the case where it counts, in instances where service providers have implemented provisioning and other functionalities that bridge the silos while providing highly efficient approaches to launching new services. Canada's SaskTel, the forward-thinking quadruple-play incumbent in Saskatchewan province, is a case in point, having gone so far as to productize field-proven solutions developed in partnership with its OSS subsidiary SaskTel International for distribution to other carriers around the world.

But old ways die slowly, especially if there's a recession to hold back spending, and, as another body of evidence attests, the question looming over the industry as a whole is whether the pace of migration to new solutions will be fast enough to overcome intensifying competitive pressure on the bottom line. "In the past, if you rolled out a new service, you rolled out a new stack of OSS because that was faster than trying to integrate everything," notes Nancee Ruzicka, an analyst with Frost & Sullivan's Stratecast telecommunications research unit. "That's led to a big mess."

But while telcos have begun "to consolidate, correlate and add some intelligence to all this data," at the current pace of change it will take the industry another ten to twenty years to finally do away with the silos altogether, Ruzicka says, adding "Nobody has resolved it."

"They've started to introduce automation,

which is huge, but the first step is to introduce automation within the silos," she says. "So we're seeing consolidation within specific silos automating individual processes. But as they complete these steps, they're pushing bottlenecks down the line. So how to consolidate between these processes and how to automate and integrate between processes remains a challenge."

That said, it's clear some carriers are much further along than others, including SaskTel, which has implemented the provisioning, activation and service assurance components of the platform marketed by SaskTel International (SI). While other carriers deploying SI solutions that Ruzicka has looked at up close are too early in the process for her to know how commercial implementation will impact operations, she says there's no doubt the new OSS components have made a big difference at SaskTel.

"It's saving them time and making people more productive," she says. "They can extend what they do into new service areas and improve productivity without adding a lot of folks."

Mergers have been a major inducement to faster migration to integrated solutions, as was the case with the huge project undertaken by Virgin Media in the U.K. following its acquisition of the country's major MSOs (see September 2007, p. 16). Similarly, last year Bell Aliant, which now serves much of eastern Canada, completed the last phase of its Facilities Management Alignment project by consolidating line cards from previously independent operating units in New Brunswick, Nova Scotia, Newfoundland, Labrador and Prince Edward Island into SI's MAR-TENS service provisioning system.

SI's solutions are also at the heart of a major back-office integration project now underway in the wake of a merger of two other North American carriers, according to informed sources. That project "is an important milestone demonstrating the SI platform has proven to be an optimal solution for very large as well as smaller carriers," says an executive close to the project, who declined to be named or to identify the carriers.



Steve Sousa, VP, marketing & operations, Sasktel International

Mobile as well as wireline carriers are turning to SI for ways to streamline OSS. For example, in June Bluegrass Cellular, based in Elizabethtown, KY, said it was deploying SI's Java EE-based OpenSwitchGate (OSG) activation software to provide a wireless provisioning solution for activating customers across its 38-county territory in central Kentucky and southern Indiana. "With SaskTel International's OSG solution in place, it will be much easier to provide a broad range of services to our customers – all activated in real-time," says Keith Carter, director of customer systems at Bluegrass. Noting SI customized OSG "to address our specific needs," he says the solution "provides support for network elements across our hybrid networks."

These and other projects employing SI software to facilitate multi-service provisioning, activation and more efficient customer service are directly benefitting from SI's ability to work with its parent company to precisely tailor solutions to real-world operational requirements, says Steve Sousa, vice president of marketing and operations at SI. "Leveraging the partnership we have with SaskTel gives us an opportunity to refine the process of integrating existing systems and preparing for changes within those systems," Sousa says. "We're not asking our clients to

take risks or to give one of our solutions a try to see if it works.”

Vendor partnerships are important as well. An essential criterion in SI's efforts to simplify multi-service provisioning and other elements of OSS is the reduction of hassles related to integration with existing billing and other back-office systems. “We have fully integrated with billing vendors and can show clients the flow through with our systems that they're looking for,” Sousa says. “We don't expect them to fund any integration to make our products work.”

Minimizing customer costs and risk includes preparations for changes in the network infrastructure that will have an impact on provisioning and activation, he adds. “We can look at a piece of hardware and how it works in a true operating environment and then work with SaskTel's subject matter experts to ensure we're in sync with their needs as we build new software elements,” Sousa says.

Reducing Costs

Practical, immediate concerns of carriers are the key drivers to SI product development, Sousa stresses. “First and foremost we're focused on helping clients reduce costs that may burden the organization from legacy systems and processes,” he says.

At the same time Sousa notes SI is concentrating on several areas of product development tied to emerging needs. For example, work is underway to support integration of PON (passive optical network) infrastructure and pair-bonded DSL into the core provisioning system.

The company is also starting to look at extension of its system capabilities into the home networking arena as new technologies emerge to give carriers an opportunity to offer home networking as a managed service. “The home is getting smarter, and consumers want to be able to activate features like home surveillance, controls over appliances and energy management,” Sousa notes. SI anticipates telcos will want to leverage provisioning, activation and service assurance capabilities to support management of devices in the home much as they manage network elements today.

R&D on such capabilities is underway at SaskTel, he adds. “We've got a general sense of where it's going and are waiting for our customers to say we're ready for this,” he says.

Preparations for future industry needs extends to the wireless arena as well, where SaskTel Mobility and many other carriers

now operating on a CDMA (Code Division Multiple Access) platform are preparing to make a transition to the Long-Term Evolution (LTE) 4G infrastructure, which is rooted in GSM/UMTS (Global System for Mobile/Universal Mobile Telecommunications System). “As Sasktel moves from CDMA to UMTS as a step toward LTE, we're gaining an understanding of carriers' evolution plans,” Sousa says. “This gives us insight into how to inventory applications and adjust the parameters in our provisioning and activation products so that once the changes are made, the new parameters are ready.”

Java Conversion

Another forward-looking initiative at SI involves the transition of all its platforms from the current coding foundation in Cobol to Java EE (Enterprise Edition), which has become the industry standard for implementing service-oriented architecture (SOA) and next-generation Web applications. As indicated in the case of the Bluegrass Cellular deployment, the transition to the Java-based version of the OMG activation suite is complete.

By year's end SI expects to complete the Java version of TRACS, a service assurance platform that is designed to simplify management of trouble tickets across all service categories while eliminating what Sousa refers to as the “swivel chair” approach to dealing with customer service calls. “Most carriers have multiple service assurance platforms, which means customer service reps have to move from one application to the next when dealing with a customer call that references more than one service,” he says. “So making TRACS the single touch point across all services reduces costs of adding new services, speeds troubleshooting and repairs and saves time and money at the point of customer contact.”

Indeed, says Ruzicka, streamlining service assurance has become a major focus of OSS upgrade efforts, especially as mobile and broadband services become ever more complex and granular. “Until now there's been no reconciliation between billing and provisioning when an order is taken to ensure that carriers are billing for everything the customer is buying and that the customer is getting everything they're billed for,” she says.

Absence of revenue assurance implementations like TRACS produces confusion when calls come in, leading to much longer call durations as services get more complex. “Now interactions with customers that were cost-

ing \$4 to \$5 per minute at average durations of five minutes per call are racking up those per-minute charges over 15 minutes or more,” Ruzicka says. “The costs are killing them.”

The conversion of MARTENS to Java is an even larger project, which SI has partnered with IBM to complete by sometime in 2011. “MARTENS is the bigger provisioning and network inventory piece of our product suite that manages the complete service inventory so that OSG and TRACS can do what they do,” Sousa explains. “All our clients are in full support of what we're doing, and, based on the feedback so far, they're quite impressed with where we're heading.”

New Complications

Ruzicka notes that while much progress has been made industry wide in the vein of automating provisioning within specific silos, problems arise as carriers streamline marketing and ordering processes by offering customers catalogs of service options online. “Carriers have great product catalogs for customers to pick out services, but they aren't tied into the back office in a way that automatically provisions the service when the customer hits enter,” she says. “Right now that order gets translated to provisioning and activation through manual intervention. So on the fulfillment side, efforts to streamline the multi-service ordering process are really tying people up.”

Solving this problem has important implications for moving to more advanced services, she adds. “If I have a way to connect to the network through a well-defined interface or template, I don't have to worry about making all those connections manually,” she says. “Service providers that have that in place will find it's much easier to take the next step to offering managed services or software as a service.”

Sousa stresses that, as the Java transition progresses, SI is continually advancing the existing provisioning platform to keep pace with such requirements. Moreover, he notes, preparing new functionalities now ensures the Java version will be in stride with market demand right out of the box. Once in Java, the new product development environment “will give us the ability to react quicker to market needs and to deliver new functionalities in a more efficient manner,” he says. That translates into cost savings for all concerned as market pressures accelerate the introduction of new services. ■