Service Fulfillment

Better integrate legacy systems to achieve flow-through provisioning

Huge losses from manual processing

Communications service providers (CSPs) lose hundreds of millions of dollars annually because of bottlenecks in order provisioning. Partially integrated business and operations support system (BSS/OSS) applications force service fulfillment operations to rely too heavily on manual processing for tedious routine tasks such as order validation and data consistency. This makes service fulfillment slower, more costly, and more prone to human error.

Reducing service fulfillment costs

From service configuration to activation, flow-through provisioning dramatically reduces fulfillment costs, delays and delivery times. By automating complex routine tasks and data conversion such as compliance checking, and better integrating fulfillment systems with one another, an ILOG-based flow-through provisioning system can greatly improve service fulfillment.

Leveraging legacy systems to stay agile and competitive

ILOG is committed to improving operations' efficiency through automation and optimization of business processes. It has extensive experience in solving fulfillment problems at major telecom carriers in Europe and the United States, applying a non-intrusive incremental approach that leverages legacy systems. ILOG-based flow-through provisioning applications provide tighter BSS/OSS integration, added flexibility and agility throughout the fulfillment chain, faster and more accurate fulfillment, and the ability to bill for services earlier. They help CSPs build a decisive competitive advantage by enabling faster changes to service offerings while bringing fulfillment costs down.

- **Ease integration of legacy systems**

- **Preprocess incoming orders**

- **Automate compliance checking**

- **Create agile service fulfillment chain**

- **Centralize business knowledge**

ILOG®

Changing the rules of business™

Flow-through
provisioning holds the answer

Years of rapid growth, deregulation and industry consolidation have created a highly complex business environment for CSPs. Customers want innovative services, lower rates and faster delivery, while business and regulatory limitations make staying competitive increasingly challenging. BSS/OSS applications must deliver fast, flexible solutions for order management, service provisioning and activation, automated flow through, back-end fulfillment, service modeling and configuration, and service resource management. CSPs have to expand customer service while improving operational efficiency and finding new ways to cut costs. Flow-through provisioning has emerged as the best solution.

Maximum flexibility and successful process automation

Process automation

ILOG technology automates critical processes, especially repetitive routine tasks that involve a large number of complex constraints, like business or wholesale order validation and consistency checking (see "Baby Bells Speed Service to CLECs," Page 4). ILOG Business Rule Management System (BRMS) solutions process thousands of constraints with exceptional speed and flexibility, and enable easy and quick maintenance with no coding. A distributed architecture ensures maximum flexibility, scalability and successful process automation. Furthermore, ILOG visualization technology models the business process, displaying the whole provisioning process and allowing proactive management of bottlenecks. The results:

- Faster, more accurate provisioning of orders
- Considerable cost reduction from focusing human resources on exception handling rather than routine tasks
- Significant reduction in risk of human error and financial penalties
- Dramatic reduction in implementation time for strategic changes determined by the company
- No-coding maintenance saves additional costs and builds agility
- Empowered business users with partial access for maintaining business logic in a secure mode

ILOG Professional Services

ILOG's highly trained and professional product consultants have the extensive experience and best practices needed to fully implement solutions for service providers, software vendors and equipment manufactures. They can assist the user in creating the most highly effective flow-through provisioning system, offering complete service fulfillment at the greatest savings.

Facilitate the integration of new and legacy systems

ILOG technology allows systems to work together. ILOG BRMS backs operators with flexibility and performance for automating data conversion and file generation between different standards, including XML, ASOG/LSOG and many legacy formats, even when there is no one-to-one match between formats. ILOG BRMS solutions empower business users with a natural-language rule interface that lets them implement changes, and perform maintenance and updates without coding. This produces a tighter, yet flexible integration of BSS/OSS applications, and cuts the risk and cost of human error from these repetitive tasks.

- Cost reductions through automation
- Fewer human errors
- Faster, more accurate processing
- Easy maintenance and updating, with no coding required, saves additional costs and builds business agility

Take advantage of network complexity to create diverse, bundled offerings

Centralize business knowledge for advanced service configuration

ILOG technology enables operators to leverage all their business knowledge to accurately configure and model services for maximum ROI. Real-time information about resources is centralized, providing data on availability, competitive pricing, customer relationship management, and market pushes and promotions. Instead of being overwhelmed by options, users can take advantage of network complexity to create diverse, bundled offerings that mix services, like wireless service with Internet access, and value-added features such as service level agreements. Using special repositories, ILOG BRMS supports centralized information storage, flexibility and performance. ILOG-based solutions infuse flexibility and agility deep into the fulfillment chain by centralizing all relevant information while allowing for rapid on-the-fly updating and maintenance without coding.

- Obtain a competitive advantage by accelerating the pace of change and the reactivity of the fulfillment chain
- Centralized business knowledge
- Cost reductions through updated business- and resource-related information
- Opportunity for more differentiated and customized offers

"APS is ushering in the next generation of competitive communications services, and ILOG JRules' advanced features and high performance enable APS customers to offer innovative service bundles to gain more revenue while decreasing delivery costs."

**– Phil Rimell
CTO and Co-Founder
JacobsRimell**

Baby Bells
speed service to CLECs

Losses from processing orders

Regional Bell Operating Carriers (RBOCs) in the United States lose their competitive edge and carry high costs by using rigid legacy order management systems. Of the service orders received by RBOCs from Competitive Local Exchange Carriers (CLECs), 30-50 percent are rejected. Information that is missing, unreadable, inaccurate or conflicting results in an order being marked "invalid," meaning it cannot be filled without manual input or correction. A single invalid order can then cost an extra $100-$200 to process.

Service providers commonly resort to using data-entry personnel to input order information manually. This solution helps reduce the costs associated with invalid orders, but it is not infallible. Moreover, manual operations – even by skilled workers – are typically far less efficient than automated systems. An RBOC's failure to respond to a CLEC request within a few days can result in hefty fines levied by the U.S. Federal Communications Commission. It can even prompt the FCC to refuse to grant a RBOC permission to serve a new local or long-distance market.

Winning back their losses

The solution they have found is in agile order validation and management for preprocessing and verifying CLEC requests to accept the valid orders and diagnose the rejected ones

An embedded business rule system can easily automate the validation process, performing consistency checking that increases the number of purchase orders accepted during the order management process. Only those orders completely rejected during the validation process have to be entered manually, and the business rules can provide diagnoses for rejections. This also frees skilled workers to concentrate on valid purchase orders, increasing operational efficiency.

Additional benefits:

- ■ Easy, cheaper maintenance: About 1,500 rules are needed to validate purchase orders, and these rules have to be updated approximately every six months. ILOG Rules enables business users to monitor, edit and maintain the rules directly.
- ■ Faster time to market: Companies are able to deploy faster with ILOG business rule management. One RBOC can now fill an order in just a week, saving millions of dollars each year by meeting FCC requirements for providing services to CLECs.

Learn more about ILOG's fulfillment offer by contacting an ILOG Sales Representative or visiting www.ilog.com/industries/ communications/ cbd_fulfillment.cfm.

■ ABOUT ILOG

ILOG's innovative enterprise-class software components and services have helped companies maximize their business agility and improve operating efficiency for over 10 years. Over 1,000 global corporations and more than 300 leading software vendors rely on ILOG's business rules, optimization and visualization technologies to achieve dramatic returns on investment, create market-defining products and services, and sharpen their competitive edge. For more details, please visit www.ilog.com

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