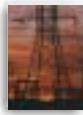




# CONNECTION

Also available at [www.ilog.com](http://www.ilog.com)



**NASA  
ILOG  
participates  
in consortium**

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**ILOG Rules  
Suite  
Unifies  
Products**

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**Vodafone  
Billing  
with  
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**Choose  
IMES  
Eases  
Mediation**

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## EDITORIAL

By Pierre Haren, ILOG CEO

*We are at the dawn of a new age in mobile communications. With the standardization of the Universal Mobile Telecommunications System (UMTS), anytime, anywhere access to the Internet will soon be fully achieved. To ensure the success of UMTS, ILOG is working with other leaders in the communications industry to create a highly flexible and reliable transitional system that enables multimode devices to tap both new UMTS services and well-established Global System for Mobiles (GSM) services. Organized by the TeleManagement Forum, the Mobile Common Configuration Management (MCCM) project has as its goal the continued seamless switching between service areas, or "cells," that mobile phone users depend on. ILOG's participation is the result of the confidence the other project members hold for the company. Our business rule engines will make MCCM possible, with consistency checking that individual service providers can easily localize. In partnering with ILOG, the other MCCM project members partnered for success.*

## Backing New Mobile Standard

### FOCUS

### **ILOG helps introduce third-generation mobile telephony**



ILOG is among the key members of the Mobile Common Configuration Management (MCCM) Catalyst Showcase, the TeleManagement Forum ([www.nmf.org](http://www.nmf.org)) project to develop a system for seamlessly switching mobile telephony between the emerging third-generation Universal Mobile Telecommunications System (UMTS) and the second-generation Global System for Mobiles (GSM).

UMTS is a broadband system for the packet-based transmission of text and digitized audio, video and multimedia at data rates as high, or higher, than 2 megabits per second. Already endorsed by major standards bodies, communications equipment suppliers and mobile network operators, UMTS is set to be the standard for mobile users worldwide by the year 2002. Once UMTS is in place, portable computers, personal data assistants and mobile phones will be able to stay con-

stantly linked to the Internet and have the same functionality anywhere. Until UMTS is fully implemented, however, UMTS devices will have to rely on the omnipresent GSM networks to stay connected.

#### GENERATION GAP

To help span the generation gap between the two systems, the TeleManagement Forum organized the MCCM project, with sponsorship from Mannesmann Mobilfunk, Orange, Sun Microsystems and T-Mobile. The goal of the project is to create a transitional system that will allow multimode devices to use GSM where UMTS service is not available.

Working with such top companies in communications as Ericsson Radio, Motorola, Nokia

Networks and Siemens, ILOG is participating in the project by contributing its know-how in rule-based data correlation. Other TeleManagement Forum members involved in the project include Bull, Compaq Computers, Cramer Systems, Evidian, Lucent Technologies and PSI.

ILOG Rules has been selected for the MCCM project. The industry-leading rule engine will serve in consistency checking and enable service providers to configure the system to their specific needs. After UMTS is fully in place, ILOG Rules will allow the providers to easily update their service applications with new offers, rates and promotions, scaling them to meet customer demand and regulatory changes. Moreover, with the fastest rule engine technology, ILOG Rules will ensure

*(Continued on Page 3)*

## EVENTS

### APRIL

#### Web Services World (SD Expo 2001)

April 8-12  
San Jose, California

#### MBA Technology Expo

April 17-20  
San Francisco, California

#### Sapphire 2001

April 22-25  
Lisbon, Portugal

#### Géo-événement 2001

April 24-26  
Paris, France

### MAY

#### Telemanagement World

May 7-10  
Nice, France

#### Wolfsburger IndustrieForum

May 9-10  
Wolfsburg, Germany

### INFORMS

May 20-22  
San Diego, California

#### XML Europe 2001

May 21-25  
Berlin, Germany

### JUNE

#### JavaOne

June 5-8  
San Francisco, California

#### Supercomm

June 5-7  
Atlanta, Georgia

#### Sapphire

June 10-15  
Orlando, Florida

#### INFORMS International

June 17-20  
Maui, Hawaii

#### Billing 2001

June 26-28  
Orlando, Florida

## COMPANY NEWS

# ILOG Takes Part in NASA Consortium

## Project to ensure reliability of software in critical computer systems

ILOG is among the industry leaders participating in the High Dependability Computing Consortium recently formed by NASA and Carnegie Mellon University to look into ways to safeguard the reliability of computing systems critical to the welfare of society. In total, 12 IT companies have agreed to work with NASA and Carnegie Mellon to promote and conduct research enabling the development of highly dependable and affordable software systems: Adobe Systems, Compaq, Hewlett-Packard, IBM, ILOG, Marimba, Microsoft, Novell, SGI, Siebel, Sybase and Sun Microsystems. NASA has awarded a \$500,000 grant to Carnegie Mellon to organize and manage the consortium's activities.

"Carnegie Mellon's expertise in robotics has played a major role in the success of numerous NASA research projects," says Dr. Henry McDonald, director of the NASA Ames Research Center. "We look forward to working with the university and our industry partners to advance NASA's computing capabilities for future research projects."

Improved computing capability is critical in such areas as air traffic control, Internet communication, power

generation and transmission, space exploration, health care and highway safety. Dependable computer technology is also necessary to ensure that the software created for any system affecting human safety functions properly.

"Carnegie Mellon has a long history of building practical computing systems and is recognized for its expertise in software engineering," says Dr. Jared L. Cohon, president of Carnegie Mellon. "We have an innovative faculty that excels in cross-disciplinary research. The university has played a lead role in forming this consortium. Once established, we will help lead it and contribute to its technical agenda. All of Carnegie Mellon's capabilities will contribute to the success of the HDCC."

The consortium is the first step by Carnegie Mellon to establish a presence in Silicon Valley. The university also has plans to establish a branch campus at NASA's research park at Moffett Field, California. ■



## ILOG Web Seminars

### Tune in and turn on to ILOG products

ILOG is making celebrities out of its top developers and marketing personnel with its highly informative series of Web seminars.

Free and accessible virtually anywhere, the seminars enable customers to tune in and turn on to ILOG products through the Internet, learning directly from the people responsible for making the industry's leading software components.

Both live and recorded seminars are available through the ILOG website, at [www.ilog.com](http://www.ilog.com). Live seminars are announced regularly by e-mail and on the website, and enable participants to interact

with the presenters in real time. Discussions can be very informative, as participants provide their own insights on challenging problems. So that no one misses out, the seminars are recorded and posted to [ILOG.com](http://ILOG.com), giving 7/24 service. The seminars are supported with presentation slides and narration from the presenters, and can be viewed with widely used Web browsers, including Netscape and Microsoft Internet Explorer.

To participate in a seminar, go to [www.seminars.ilog.com](http://www.seminars.ilog.com), where you will find sign-up information and listings for upcoming and recorded seminars.

### Live Web Seminars

April, May and June

- **Powering Internet Applications With Business Rules**  
Eric Marciano, April 5, 2001, 6:00 a.m. PST
- **ILOG Technology Primer: Business Rules for Supply Chain**  
Peter Carter, April 25, 2001, 10:00 a.m. PST
- **ILOG Technology Primer: Supply Chain Event Management**  
Peter Carter, May 16, 2001, 10:00 a.m. PST
- **ILOG Technology Primer: Enabling Value Chain Management**  
Peter Carter, June 27, 2001, 10:00 a.m. PST

## Companies Expand with ILOG Server

*Software component handles heavy traffic*

Rapid expansion has placed heavy demands on complex networks. But ILOG Server is taking it in stride, with scalability that gives full control to the operators of these networks, including SNCF's ([www.sncf.com](http://www.sncf.com)) new railway switching system and Teleglobe's ([www.teleglobe.com](http://www.teleglobe.com)) new international calling system.



More than ever before, companies are relying on ILOG Server to ensure the smooth flow of information through intricate supervision systems. Now in Version 5.0, this proven performer for connecting vastly distributed clients lets companies also take full advantage of the Internet. ILOG Server is a highly scalable, C++ object framework with powerful business modeling facilities. It can fully represent the elements and topology of a supervised system as shared in-memory services that result in exponential speed gains. ILOG Server's modeling abstractions perfectly match those offered by object-oriented design notation, and bridge the gap between business model design and implementation. Furthermore, it maintains continuity throughout a supervision system by sharing business events, including object modifications and structural changes, with subscribing clients.

### JAVA AND C++ SUPPORT

ILOG Server provides ready-to-use graphical models for Java Swing controls, the ILOG JViews Component Suite and ILOG Views Data Access. GUI clients can subscribe to specific views of a system, and send and receive data and requests through the fast communication layer for Java and C++ provided by ILOG Server or a CORBA bus based on IONA Orbix or Borland VisiBroker. ILOG Server's event-driven architecture eliminates the need for polling. It pushes data and events to client applications, further improving performance.



**ILOG Server Studio**

### ILOG SERVER WITH ILOG RULES

The combination of ILOG Server and ILOG Rules has proven to be very effective in building intelligent supervision systems. While ILOG Server provides the business models and their associated business events, ILOG Rules brings the power of business rules to the application.

ILOG Server business objects can be directly mapped in the ILOG Rules engine, and business rules directly applied to the business objects to perform filtering, correlation or other tasks, bringing unmatched decision support to operators. The flexibility of ILOG Server for modeling and client integration, combined with the flexibility of ILOG Rules for the implementation of business logic, brings exceptional power to the developer to build smart supervision systems that can be easily adapted as business changes. ■

## Mixing Mobile Systems

*(Continued from Page 1)*

reliability and high performance for real-time processing. UMTS will make it possible to provide a variety of new mobile services, including several alternative methods for paying for connections: pay per bit, pay per session, flat rate, asymmetric bandwidth and others. The higher bandwidth will also support services that may become widely relied upon, including video conferencing and online supply management. ILOG

Rules and ILOG JRules are widely used in communications applications for network and service management, customer care and billing, and customer relationship management. They come with an integrated development environment for creating and debugging applications, and a customizable and extensible language that places rule definition in the hands of business users such as marketing and customer service personnel.

## ILOG International Users Meeting

October 25-26, Versailles, France

**REGISTER TODAY!**



From throughout the world, software developers, development managers and business executives gather annually at the ILOG International Users Meeting to talk shop about ILOG products and the future of software development.

This year's meet will be held Oct. 25-26, 2001, in Versailles, France. It will bring together customers, partners, prospects, and ILOG representatives from R&D, sales and marketing, allowing them to discuss the latest approaches to application development and software component technology. Software developers, IT managers and business professionals from the leading industries, including manufacturing, telecommunications, transportation, defense, and financial services and banking, will share their insights on tackling today's biggest software challenges.

A comprehensive program of in-depth developer training and industry-specific topics awaits:

- **Product technology sessions:** tutorials and workshops for newcomers and advanced users on ILOG products, application architectures and development tips
- **Industry sessions:** presentations providing attendees with a comprehensive overview of each industry's key problems, trends and future applications
- **Partner Showcase:** an exhibition spotlighting the products, solutions and services of ILOG and its strategic partners

ILOG Users Meeting 2001 is the ideal place to learn about ILOG products and the vast variety of applications built with them. It is also great for sharing knowledge and building professional relationships. For registration and up-to-date information, visit the Users Meeting 2001 website at [www.ilog.com/corporate/users/](http://www.ilog.com/corporate/users/). ■

# ILOG Unifies Rule Products

*For C++ users, the envy is over*

In April 2000, ILOG placed Java rule development in the hands of company decision-makers when it introduced ILOG JRules 3.0 and its unique, customizable language, which brought business rule creation to business people for the first time.

Well, get ready to release the balloons again, as ILOG unveils the new ILOG Business Rule Components suite, extending the extremely successful development environment of ILOG JRules to the widely used C++ ILOG Rules.

By unifying its business rule product line, ILOG is able to bring rule developers the best of both worlds: the high performance of C++ and the high productivity of Java. The new suite gives customers access to the same advanced functionality regardless of whether rule deployment is in C++ or Java. ILOG business rule engines are ideal for applications whose logic needs to be changed often and managed independently of application code. They rapidly process rules with algorithms optimized for the job, specifically in object-oriented environments.

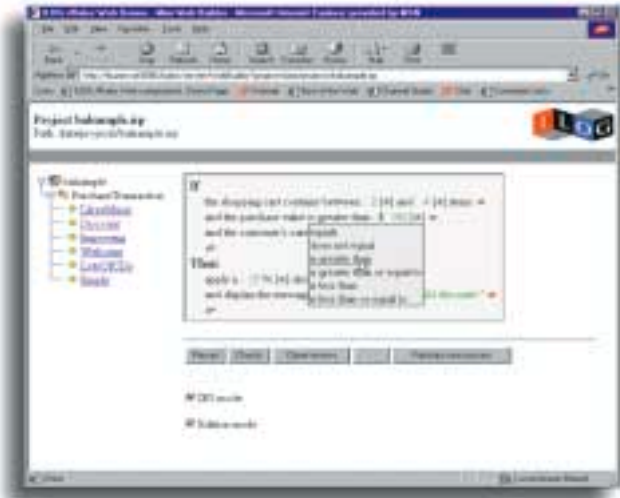
Now shared by ILOG Rules and ILOG JRules is a robust set of development tools, called the ILOG RuleKit, which includes:

- **Rule Builder:** a fully integrated graphical environment for developing and debugging ILOG business rule engines
- **Business Rule Languages:** a predefined set of business rule languages that can be used “out of the box” or customized to help the end user access business rules
- **Business Rule Editors:** intuitive, user-friendly editors that enable non-technical users to create business rules using a point-and-click interface with cut-and-paste pop-up windows and drop-down menus

### NEED FOR FLEXIBILITY

Today’s business applications need to be highly flexible, adapting readily to changes in customer demand, competition and regulation. The new ILOG Business Rule Components ensure this flexibility with the most versatile business rule engines available.

The components greatly improve the maintainability and perform-



**ILOG rule editor**

ance of the most dynamic aspect of any business application: business logic. They enable business logic to be changed without altering the main application code, and with the ILOG RuleKit, business rules are easy to create and maintain, cutting costs and extending the life of applications.

ILOG business rules can be seamlessly integrated into C++ or Java applications, and common distributed computing architectures. They can be

deployed in Web-based or back-office applications, enabling the consistent use of business policies across an enterprise through shared business rules.

All this is backed by high performance. In mission-critical applications such as event management and online customer support, instant response is essential. ILOG business rule engines are among the fastest on the market, clocking benchmark speeds as high as 18,000 rules per second. ■

## ILOG Rules

### Business Rule Engine for C++

With ILOG Rules 7.0, C++ users benefit from:

- **Reflection API:** build object models dynamically at runtime, using the ILOG Rules Reflection API.
- **Speed of C++:** the most efficient object-oriented language combined with a decade of rule engine experience in performance-critical network monitoring and management applications, making ILOG Rules the fastest rule engine on the market.

## ILOG JRules

### Business Rule Engine for Java

With ILOG JRules 3.1, Java users benefit from:

- **Platform independence:** ILOG JRules is 100% Pure Java™, enabling it to be integrated into any Java application, fulfilling the “write once, use anywhere” Java promise.
- **J2EE integration:** ILOG JRules can be embedded directly into Enterprise Java Beans (EJBs), as well as stateless and stateful session Beans. Additionally, EJB objects can be referenced within rules.
- **Automatic database mapping:** Access any JDBC-compliant database automatically within rules using a database mapping created with a graphical interface or XML.
- **Rule compilation:** Improve performance by a factor of 4 to 10 by compiling rules.

## Vodafone Bills with ILOG Rules

*New Billit covers mobile IP and content commerce*

Vodafone TeleCommerce GmbH. ensures the flexibility of Vodafone Billit, a new billing solution for mobile-communications providers, by using ILOG Rules, the business rule component setting new standards for the communications industry. Vodafone TeleCommerce is owned by Vodafone Group Plc. ([www.vodafone.com](http://www.vodafone.com)), the biggest mobile phone business group in the world, with approximately 78.7 million customers. Vodafone TeleCommerce provides mobile phone solutions, services and products.

*"We were extremely impressed by the flexibility offered by ILOG Rules for managing the billing logic in our product," says Dr. Jürgen Lemke, Billit project manager at Vodafone TeleCommerce. "We could tell ILOG Rules was written specifically for this sort of deployment because its highly intuitive development environment let us quickly do exactly what we wanted to do in. Moreover, its openness will enable our customers to easily adapt the product to their needs for many years to come."*

Vodafone TeleCommerce plans to replace existing billing systems with the new solution, which provides real-time billing for mobile Internet

Protocol (IP) and content commerce. Users inside and outside the Vodafone group are expected to benefit from Billit.

### STRONG NEED FOR FLEXIBILITY

Billing applications for mobile IP and content commerce require tremendous flexibility in order to adapt quickly to changes in customer demand, industry regulation and competition. ILOG Rules is ideal for creating complex billing systems like Billit, which can simultaneously be used by several companies and cover a vast variety of services.

Also available in Java, as ILOG JRules, ILOG Rules is becoming widely used throughout telecom for alarm filtering and correlation, customer billing and billing mediation, and customer relationship management. ■



## isMobile Expects 50% Savings with ILOG

*E-scheduler manages mobile workforce*

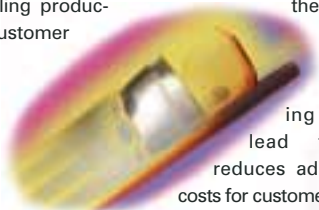
To further its mission to "mPower" the mobile workforce, isMobile ([www.ismobile.com](http://www.ismobile.com)) has enhanced its top application with ILOG optimization and visualization software. isMobile's Coordinator work scheduling application enables companies to manage the activities of field personnel through mobile phones, computers and personal data assistants. Already isMobile projects savings as high as 50% in administrative costs for its customers, while doubling productivity, revenue and customer satisfaction.

*"ILOG's software was integrated rapidly and seamlessly into our overall application," says Mikael Bäckman, director of product*

development at isMobile. *"Using prewritten software components from ILOG was the logical choice, in order to meet time-to-market, functionality and performance demands."*

Coordinator uses a dispatching scheduler built with industry-leading constraint-programming optimizers ILOG Solver and ILOG Scheduler, and a Web-accessible graphical front end created with ILOG JViews, ILOG's Java visualization component. Using a Web browser from virtually any location, a user can gain real-time access to the scheduler through the front end.

isMobile's latest offering shortens lead time and reduces administrative costs for customers and users by providing better communication and faster information flow. ■



## NEC Adopts ILOG Telecom Graphics

*Equipment provider switching to open standards*

NEC Corp. ([www.nec.com](http://www.nec.com)), a leading provider of computer, communications and electronic equipment, is switching to open visualization standards for network management systems, and has selected ILOG JTGO and the ILOG JViews Component Suite to ensure its success. Devoted to making graphical user interfaces (GUIs) for communications management, ILOG JTGO uses the widely accepted guidelines set by such industry standards organizations as the TeleManagement Forum.

NEC plans to use ILOG JTGO in upgrading OPENBASE, the company's network management platform. In making its decision, NEC cited ILOG's commitment to open standards and its development of Java products based on human-factor research. Such support will enable NEC customers to customize OPENBASE to meet their unique requirements.



*"We also selected the ILOG GUI software components because they are the most complete graphics solution on the market for network management interfaces, and operators seem to prefer the rich graphics and an intuitive look and feel," says Yozo Imatake, general manager of the network management systems development division of NEC. "ILOG GUI software components, the de facto industry standard for network management, dramatically reduce development time, which will mean we can deploy our new NMS products more quickly."* ■

# Carmakers to Test Designs with ILOG Configurator

Advanced optimizer to help reduce cockpit parts from over 100 to just 12



Software solution provider to the automakers, Ford's Visteon Corp. ([www.visteon.com](http://www.visteon.com)) has launched an innovative design project to reduce the number of parts in the vehicle cockpit, using an application based on ILOG Configurator.

Powered by the industry-leading ILOG Solver for constraint programming, ILOG Configurator applies end-user preferences in optimizing design parameters. In the Visteon solution, it will enable automotive engineers to test-drive their designs before constructing vehicle prototypes. Besides reducing time and cost in designing cars, the application is expected to reduce vehicle weight and improve quality and performance. A goal of the project is to reduce the number of cockpit parts from more than 100 to just 12.

Unlike other configuration programs, ILOG Configurator concurrently

considers all the possible configurations to find the optimal ones for the user. This extremely flexible approach is made possible by the constraint programming technology of ILOG Solver, which lets the user prioritize the desired features, rather than let the application impose an order. ILOG Configurator is part of the ILOG Optimization Suite, which is used throughout the automotive industry to solve a wide variety of problems, including production sequencing and design optimization.

ILOG is the leading provider of optimization software components. With ILOG's cutting-edge software, automotive manufacturers worldwide are better able to stay competitive by meeting the market's ever-changing demands. Other automotive leaders powered by ILOG include DaimlerChrysler, Michelin, Nissan, Peugeot-Citroën and Renault. ■



## AspenTech Extends ILOG Partnership

New agreement puts ILOG JViews into Aspen eSupply Chain Suite

Aspen Technology (AspenTech; [www.aspentech.com](http://www.aspentech.com)) has extended its long relationship with ILOG by signing an agreement to integrate the ILOG JViews Component Suite into AspenTech's e-business software for supply-chain management.

The leading supplier of integrated software solutions that enable process manufacturers to automate and optimize their plants and supply chains, AspenTech offers the industry's broadest family of scalable solutions for achieving competitive advantage in the Internet economy. ILOG JViews is being integrated into the Aspen eSupply Chain Suite. The ILOG product will impart a faster, more intuitive graphical user interface (GUI), giving end users greater command over supply-chain information via the Internet or corporate Intranet.

"This new licensing agreement between AspenTech and ILOG further strengthens our ability to deliver products that create real value for our customers," says Steve Williams, vice president of product development at AspenTech. "Aspen's leading e-supply chain and e-business software, combined with ILOG's superior graphical user interface, make it easier for our customers to quickly and accurately share and act on

real-time knowledge gained throughout the extended value chain."

### ACCELERATED DEVELOPMENT

With customer-proven components, ILOG JViews considerably shortens development time for interactive enterprise GUIs. It comes complete with a set of JavaBeans, class libraries and custom editing tools for quick development and deployment. With it, AspenTech will create custom supply-chain "e-cockpit" displays that include asset management maps, production scheduling charts, and work and process flow-design monitoring diagrams.

"We are excited about expanding our relationship with a market leader like AspenTech," says Todd Lowe, executive vice president and general manager of ILOG's Value Chain Management Division. "Both companies share a common mission to dramatically enhance supply-chain collaborative capabilities and create real value for the process industry."

The agreement extends a 12-year business partnership in which AspenTech has used ILOG CPLEX optimization software in its supply-chain, manufacturing and engineering product suites. ■



## Advanced Software Assigns Tasks with ILOG Dispatcher

ILOG JViews powers Web access

To address the need for a reactive mobile workforce in today's increasingly customer-centric maintenance and repair market, French software vendor Advanced Software ([www.optimup.com](http://www.optimup.com)) has created Optim'up, an application for optimizing task scheduling for mobile resources with ILOG technology.

Optim'up includes Optim'up Dispatching, a flexible optimization solution based on ILOG Dispatcher and ILOG Solver and designed to integrate daily operational activities, and Optim'up Java Charts, a rich, customizable pure-Java GUI based on ILOG JViews that gives access to all the features of the Optim'up solution. The Advanced Software solution facilitates the flow of information between mobile maintenance and field repair personnel and team managers. Operations managers can keep in touch with team members wherever they are, and have access to up-to-the-minute information for fast decision-making when unforeseen changes occur in day-to-day activities.

Advanced Software has leveraged its unique know-how and extensive experience to deliver the definitive optimization platform to its customers. Its developers maintain access to the system via the Internet or an interactive voice-mail server.

The client-server architecture of Optim'up, based upon market standards, facilitates its integration into the user's environment. Interfaces are made seamlessly with existing third-party software solutions, including enterprise resource planning, customer relationship management, human resource management and payroll systems. ■

## Carmen Systems and ILOG Team Up

*Partnership to create new Web-accessible scheduling solutions for airline industry*

Leaders in airline scheduling and software components respectively, Carmen Systems ([www.carmensystems.com](http://www.carmensystems.com)) and ILOG have formed a long-term partnership to power Carmen management solutions with ILOG products.



Encompassing ILOG optimization and visualization software, the partnership will greatly benefit Carmen in developing systems supporting future operations management of air carriers around the world. Already a longtime user of ILOG CPLEX, Carmen plans to provide a new generation of integrated decision-support solutions for crew and fleet scheduling and yield management, better applying Carmen's long experience with the airline industry. The products are to be fully Web-accessible, allowing crews to remotely check their schedules and



give their work preferences via the Internet. With the ILOG components, Carmen is expected to dramatically reduce its development costs and bring new scheduling products to market more quickly. Using ILOG's proven software also means fewer risks for both Carmen and its customers.

*"The partnership with ILOG fits seamlessly with our overall strategy to use building blocks of standard software to shorten time*

*to market,"* says Ola Tiverman, R&D director at Carmen Systems. *"The decision was based on our excellent working relationship and ILOG's leading-edge products."*

Carmen, which counts seven of Europe's top eight airlines among its customers, will use ILOG Solver to support planning agents in making complex decisions on crew scheduling. ILOG Solver uses advanced constraint programming technology to answer problems for such mission-critical operations as the planning of thousands of flight movements and the assigning of personnel based on preferences and regulations.

Carmen has also chosen ILOG JViews as the Java visualization engine for the Web-enabled graphical user interfaces (GUIs) of the scheduling products. Highly customizable, ILOG JViews allows a GUI to be configured exactly to the requirements of an air carrier. Carmen will use ILOG JViews to display a complete range of planning graphics, including slip charts, maps and Gantt charts showing up to 50,000 tasks.

*"We are very pleased that Carmen Systems, with its leading position in European airline operations management, has decided to partner with us,"* says Pierre Haren, ILOG CEO. *"Carmen Systems is a leading provider of airline crew management systems based on optimization. With the assistance of ILOG's software, I am convinced that they will enable the airlines to reach new heights in performance and quality of service."* ■

## Inovant to Vet Visa Transactions with ILOG JRules

*Integration part of complete VisaNet overhaul*

Inovant ([www.inovant.com](http://www.inovant.com)), the IT arm of Visa International, is integrating ILOG JRules business rule software into the automated functionality of the subsidiary's new Web-based profile management system. The rule component will enable Inovant to better maintain the business-policy logic governing Visa's electronic interaction with its 21,000 member banks.



The new profile management system is part of a complete overhaul of VisaNet, the world's largest and most sophisticated consumer financial transaction processing system. Inovant operates the global transaction-processing network supporting Visa's products. ILOG JRules will be used to automate the complex validation tasks associated with clearing transactions.



*"We manage a tremendously complex global transaction processing system,"* says Dimitri Karavias, senior vice president of VisaNet Management Systems at Inovant, *"and as we re-engineer that system to meet the rapidly growing payment volume generated by Visa, we need tools like ILOG JRules that can bring greater efficiencies to the system. We selected ILOG JRules because it is flexible and easy to embed, allows us to dynamically change our member profile management application, has the performance to support our highly demanding transaction volume and reduces the development cost of making changes to the profile management system."*

Inovant's non-technical personnel will benefit from the customizable rule language support of ILOG JRules, which will allow them to quickly update VisaNet in response to rapid changes in the market and customer demand. Also, ILOG JRules externalizes business rules, allowing them to be written and then integrated with VisaNet without taking the application offline. ILOG JRules supports the creation of flexible, adaptable business rule syntaxes. This unique capability lets business users write rules using easy-to-understand rule terminology tailored to their own industry, rather than a one-size-fits-all business rule language.

Paired with ILOG JRules Rule Editor, a rule language editor that has an intuitive GUI, rule creation is greatly simplified. Other key features of the product include support for eXtensible Markup Language (XML), for the sharing of business rules on the Web, and Enterprise Java Beans, for applications running on the Java Standard Enterprise Edition platform. ■

## Talking about ILOG

### VODAFONE

"We were extremely impressed by the flexibility offered by ILOG Rules for managing the billing logic in our product. We could tell ILOG Rules was written specifically for this sort of deployment because its highly intuitive development environment let us quickly do exactly what we wanted to do in. Moreover, its openness will enable our customers to easily adapt the product to their needs for many years to come."

Dr. Jürgen Lemke  
Billit Project Manager

### INOVANT

"We manage a tremendously complex global transaction processing system, and as we re-engineer that system to meet the rapidly growing payment volume generated by Visa, we need tools like ILOG JRules that can bring greater efficiencies to the system."

Dimitri Karavias  
Senior Vice President of VisaNet  
Management Systems

### ASPENTECH

"This new licensing agreement between AspenTech and ILOG further strengthens our ability to deliver products that create real value for our customers. Aspen's leading e-supply chain and e-business software, combined with ILOG's superior graphical user interface, make it easier for our customers to quickly and accurately share and act on real-time knowledge gained throughout the extended value chain."

Steve Williams  
Vice President of Product Development

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## CUSTOMER FOCUS

### Communications Billing Mediation

# Choose IMES Eases Billing

## ILOG-powered processing ensures customer service

As communications technology becomes increasingly complex, greater emphasis is being placed on the role of billing mediation. It is enabling service providers to surpass customer demand for quality through close network monitoring and accurate billing.

Choose Technologies ([www.choosetech.com](http://www.choosetech.com)) has built a cutting-edge billing mediation solution with ILOG software components. Called IMES, the solution uses ILOG Server, ILOG Rules, ILOG Views and ILOG TGO to manage, configure and visualize the billing mediation process.

### THE NEW CHALLENGE

Billing mediation involves collecting call data records (CDRs) from various sources and correlating, aggregating and converting them into formats for processing by billing, quality control, planning and customer care systems. It also includes fraud detection, checking data to determine whether it originated from properly registered customers.

Further complicating billing mediation today is the variety of systems maintained. Each network system generates its own CDRs, usually requiring the network operator to have a separate CDR-processing solution for each system. With several processing solutions comes the need for a centralized system for correlating billing data to avoid significant losses -- estimated by some telcos to be as much as 3 percent of their income -- that result in reduced customer satisfaction.



Adding to this complexity is a highly competitive market driven by demand for greater customer care and new services. Billing mediation must be able to rapidly adopt changes and assume their strategic function. All this depends on the CDR, which contains all the information needed to measure quality, need for expansion and demand for services.

### FLEXIBLE AND POWERFUL SOLUTION

The IMES billing mediation solution supports new services such as prepaid and hot-billing plans, and provides statistics to monitor network quality and expansion in evolving multinet environments.

IMES is a collection of CDR processors managed by ILOG Server. Several types of collecting processes deliver CDRs to IMES. The solution uses ILOG Rules to convert the incoming data into a standard format, validate the data and channel it to various systems, including those for billing, gathering statistics and backing up records.

ILOG Rules provides high flexibility, enabling business users to configure the solution with a rule builder and their own business rules, cope with heterogeneous networks and legacy systems, and configure new data for quality, demand and planning analysis.

High performance is obtained with ILOG Server-coordinated parallel processing of CDR files. IMES is able to handle 120 million CDRs per day, with peaks as high as 240,000 CDRs per minute.

The whole process is supervised with an ILOG Rules-based alarm filtering system, and monitored with a graphical user interface built with ILOG Server, ILOG Views and ILOG TGO.

## New ILOG Office in D.C. Area



To better serve our U.S. customers in the New England area, ILOG has opened a new branch office near Washington, D.C. The office's address is 4350 North Fairfax Drive, Suite 800, Arlington, VA 22203-1619. Its main phone and fax numbers are (703) 351-9007 and (703) 351-7775, respectively.