

CLARITY SYSTEMS

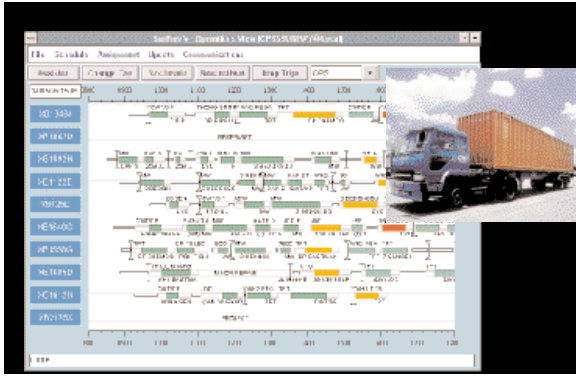
FREIGHT CONTAINER SCHEDULING

In Terms of shipping tonnage, the Port of Singapore is the busiest in the world. Behind this success is coordination between the port operators and the trucking companies that move the containers brought in on freighters. To ensure this coordination and maintain customer satisfaction, the trucking companies use a Clarity Systems optimization application, SunRay V, based on ILOG components, to generate schedules that smoothly match vehicles to port operations. The application handles a tremendous volume of constraints involving destinations, capacities and regulations. A single entry, for example, can covers container description, cargo classification, container itinerary, deadlines, release dates, and sundry other items vital to getting the freight to the right destination on time. Handling that volume and rapidly generating schedules are the primary advantages to the application.

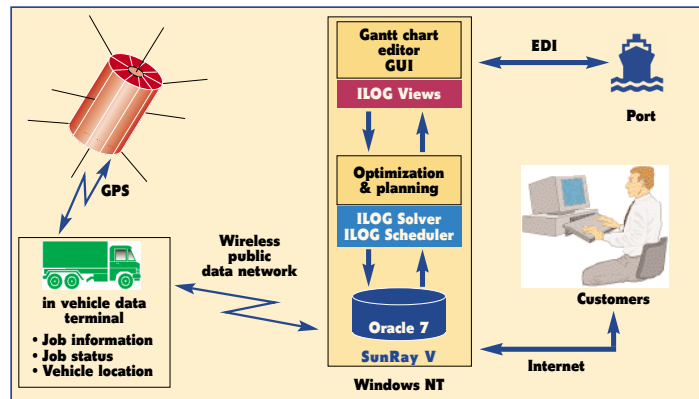
“Clarity Systems’ SunRay V application lets container companies optimize their fleets and resources. With ILOG components, SunRay V offers a reliable and quality transport service.”

● Chew Keng Wah
Managing Director
Clarity Systems





SunRay V application architecture



CLARITY SYSTEMS PTE LTD.

Clarity Systems Pte Ltd., a specialist in decision-support systems, offers cutting-edge planning, scheduling and resource allocation systems. Its customers include Singapore Airlines, Singapore Press Holdings, Singapore Ministry of Defense and CWT Distribution Ltd.

ABOUT ILOG

ILOG is a leading provider of advanced C++ and Java® software components for graphics and resource optimization. ILOG products deliver high-performance data visualization for 2D and 3D user interfaces; integer, linear and constraint solvers for resource optimization, scheduling, logistics and planning applications; dynamic rule systems for intelligent agents and real-time data flow control, and components for integrating modules with real-time and relational data sources. Founded in 1987, ILOG now employs more than 470 people in seven countries. Visit www.ilog.com for additional information.

RELIABLE MANAGEMENT OF FREIGHT CONTAINERS

At the Port of Singapore, schedules for moving containers and assigning resources used to be created by hand. Schedulers balanced customer orders, port requirements and operational constraints in a complex, time-consuming process affecting all the freight handlers. Often the schedulers fell behind, forcing the trucking companies to make their own decisions. This could result in delays, higher operating costs and lower customer satisfaction.

Clarity Systems' vehicle scheduling application uses ILOG Solver, ILOG Scheduler and ILOG Views to help the companies manage their operations. ILOG Solver and ILOG Scheduler treat shipment data as constraints in rapidly building optimized schedules, while ILOG Views allows the schedulers to quickly refine the schedules through a graphical user interface (GUI).

Since its introduction, SunRay V has decreased container turnaround time, improved resource utilization and boosted the overall productivity of the port. At the company CWT Distribution Ltd., for example, productivity has improved approximately 25%, yielding a substantial improvement in customer service.

PROJECT

SunRay V was developed by Clarity Systems in collaboration with the Information Technology Institute of the National Computer Board of Singapore. From specification to delivery, the system was developed in only 18 months.

BENEFITS

The ILOG components enable SunRay V users to increase the handling capacity of their trucks. For example, the accurate capacity planning of SunRay V has reduced subcontracting costs by as much as 10%, since more work can be done with internal resources. The application reduces lead times for onward shipping and improves the accuracy of delivery dates. Also, SunRay V provides on-line operational and management data, giving users real-time access to information crucial to making business decisions.

France ILOG S.A. - BP 85, 9 rue de Verdun, 94253 Gentilly Cedex - Tel: +33 (0)1 49 08 35 00 - Fax: +33 (0)1 49 08 35 10 - E-mail: info@ilog.fr • Germany ILOG Deutschland GmbH - Ober-Eschbacher-Strasse 109 - 61352 Bad Homburg v.d.H. - Tel.: +49 6172 40 60 - 0 - Fax: +49 6172 40 60 - 10 - E-mail: info@ilog.de • Japan ILOG CO., LTD - 3F YS Sanbancho Building, 24-14 Sanbancho, Chiyoda-ku, Tokyo 102-0075 - Tel: +81 3 5211 5770 - Fax: +81 3 5211 5771 - E-mail: info@ilog.co.jp • Singapore ILOG (S) Pte Ltd - 73 Science Park Drive, #B1-15 Cintech 1, Singapore 118254 - Tel: +65 773 06 26 - Fax: +65 773 04 39 - E-mail: info@ilog.com.sg • Spain ILOG SA - Gobelas 21, 28023 Madrid - Tel: +34 91 710 2480 - Fax: +34 91 372 9976 - E-mail: info@ilog.es • UK ILOG Ltd - Gentilly House, Bracknell Beeches, Bracknell, Berkshire, RG12 7BW - Tel: +44 (0) 1344 66 16 00 - Fax: +44 (0) 1344 66 16 01 - E-mail: info@ilog.co.uk • USA ILOG, Inc. - 1080 Linda Vista Avenue, Mountain View, CA 94043 - Tel: +1 650 567-8000 - Fax: +1 650 567-8001 - E-mail: info@ilog.com • ILOG Direct - 889 Alder Avenue Suite 200, Incline Village, NV 89451 - Tel: +1 775 322 7600 & +1 800 FOR ILOG - Fax: +1 775 322 3030 • URL: <http://www.ilog.com> • Representatives and distributors in other countries

ILOG, CPLEX and the ILOG logo are registered trademarks, and all ILOG product names are trademarks or registered trademarks of their respective holders. The information presented in this brochure is summary in nature, subject to change, non-contractual, and intended only for general information.