Changing the rules of business™

Dear ILOG ODMS Customer:

Announcing the Fall 2007 Release of ILOG ODMS with the introduction of ILOG CPLEX 11.0

We appreciate your continued support of ILOG's optimization products and hope you will find the improvements and features of this release helpful.

ILOG CPLEX 11 delivers breakthrough performance gains for mixed integer programming (MIP) models with linear objective functions as a result of new and improved algorithms, along with enhanced parallel MIP optimization and innovative usability features designed to make it more easily adaptable to practical business requirements.

Highlights of the new CPLEX 11.0 and the other ODMS product releases, OPL 5.5, ODM 2.5, CP Optimizer 1.1, and CP 1.3, are listed below. More details can be found in the Release Notes of each product.

ILOG CPLEX 11.0

- *Significant Performance Improvements for MIP models with linear objective functions*
  - Introduction of *dynamic search*, ILOG's latest twist on the branch-and-cut algorithm
  - Advancements in branching, cuts and heuristics for conventional branch-and-cut
  - CPLEX is able to select the more efficient search strategy based on model characteristics
- *Enhanced Parallel MIP Optimization Capabilities*
  - New *deterministic* mode provides repeatable, invariant solution path
  - *Opportunistic* mode performs less synchronization between threads, which may result in different solution paths but potentially faster performance
- *Multiple MIP Solutions*
  - New *solution pool* feature enables users to consider multiple solutions to a MIP model
  - CPLEX can collect all (optimal) solutions or solutions that satisfy criteria specified by solution pool filters and parameters
- *Performance Tuning*
  - Analyze one model or a group of models to identify parameter settings that yield better performance than default settings
- *New Platform Support for MacOS 10.4 for 32 bit Intel Processors*

ILOG OPL Development Studio 5.5

- *Support of new CPLEX 11 features*
  - Solution pool - generated solutions are collected and displayed in the Problem Browser, where values of both decision variables and objective functions can be compared
  - Performance tuning tool can be launched from the OPL IDE and the progress can be monitored. The parameter settings recommended after the tuning are available as a standard OPL setting file. Also available through OPLRun, OPL Interfaces and scripting
  - Parallel solving on multi-core and multi-CPU machines is possible. All CPLEX options are available, including choice of new *deterministic* or traditional *opportunistic* parallel mode
- *Sorted and ordered sets*
  - Sets can be kept in constructed-, sorted- or reverse sorted order
- *Improved integration of modeling language and scripting*
  - Modeling functions can be used from scripting
- *Launch of OPLRun directly from IDE*
  - A run configuration can be launched as a separate process
  - Eliminates overhead of IDE and allows execution in 64 bit mode

ILOG Optimization Decision Manager 2.5

Changing the rules of business™

- *Collaborative planning*
  - Scenarios and personal workspaces are stored in a centralized repository (relational database)
  - Multiple planners and reviewers can share scenarios - scenario locking ensures data consistency
- *Filtering and Pivot Tables*
  - Interactive filtering allows attribute-based drill-down into large data sets
  - Embedded pivot table supports flexible solution views and data aggregation
- *Support for parallel problem solving with CPLEX 11*
  - ODM-based applications can now leverage the full solving power of multi-core desktops
- *Quadratic models now possible in ODM*
  - Models can include hard quadratic constraints and quadratic goals

ILOG CP Optimizer 1.1

- *Minor Release Containing Same Functionality as CP Optimizer 1.0*
- *New Platform Support for MacOS 10.4 for 32 bit Intel Processors*

ILOG CP 1.3

- *Minor Release with Concert 2.5 Compatibility*
  - ILOG CP 1.3 is fully compatible with the ILOG Concert 2.5 Technology used by CPLEX 11.

ILOG CPLEX, OPL, ODM, CP Optimizer, and CP are the five products in the ILOG Optimization Decision Management System (ODMS), which is ILOG's complete system for building optimization model-based applications:

- *ILOG CPLEX – A Mathematical Programming Engine* that solves the full range of LP, MIP, QP, QCP and MIQCP problems encountered in the real world.
- *ILOG OPL Development Studio – A complete IDE and modeling language* for rapid development and deployment of optimization models; OPL also supports application generation with ILOG Optimization Decision Manager.
- *ILOG Optimization Decision Manager (ODM) – An Optimization Application Development Tool* for developing interactive decision support applications with out of the box "what-if" analysis, scenario comparison and goal programming.
- *ILOG CP Optimizer – The First Automatic Constraint Programming Optimizer* featuring a model and run development process for problems difficult to solve using traditional mathematical programming methods. CP Optimizer is fully integrated with OPL and ODM to allow use of Constraint Programming technology in optimization applications.
- *ILOG CP – A complete and feature rich Constraint Programming Engine* that solves complex scheduling and routing problems.

Finally, please remember our standard policy for support of old versions of our products: releases are supported for 2 years from the availability date of the replacement release. The specific dates are as follows:

Product	Release	End of Maintenance
ILOG CP 1.0	09-Jan-2006	25-Jul-2008
ILOG CP 1.1	25-Jul-2006	21-May-2009
ILOG CP 1.2	21-May-2007	22-Oct-2009
ILOG CP 1.3	22-Oct-2007	Current Version
ILOG CP Optimizer 1.0	21-May-2007	22-Oct-2009
ILOG CP Optimizer 1.1	22-Oct-2007	Current Version
ILOG CPLEX 9.1	19-Apr-2005	09-Jan-2008
ILOG CPLEX 10.0	09-Jan-2006	25-Jul-2008

Changing the rules of business™

ILOG CPLEX 10.1	25-Jul-2006	21-May-2009
ILOG CPLEX 10.2	21-May-2007	22-Oct-2009
ILOG CPLEX 11.0	22-Oct-2007	Current Version
ILOG ODM 1.0	25-Apr-2005	25-Jul-2008
ILOG ODM 2.0	25-Jul-2006	08-Dec-2008
ILOG ODM 2.1	08-Dec-2006	21-May-2009
ILOG ODM 2.2	21-May-2007	22-Oct-2009
ILOG ODM 2.5	22-Oct-2007	Current Version
ILOG OPL Development Studio 4.0	19-Apr-2005	05-Sep-2007
ILOG OPL Development Studio 4.1	05-Sep-2005	09-Jan-2008
ILOG OPL Development Studio 4.2	09-Jan-2006	25-Jul-2008
ILOG OPL Development Studio 5.0	25-Jul-2006	08-Dec-2008
ILOG OPL Development Studio 5.1	08-Dec-2006	21-May-2009
ILOG OPL Development Studio 5.2	21-May-2007	22-Oct-2009
ILOG OPL Development Studio 5.5	22-Oct-2007	Current Version
ILOG OPL Studio 3.7	17-Nov-2003	19-Apr-2007
ILOG Dispatcher 4.1	19-Apr-2005	09-Jan-2008
(Subsequent Dispatcher releases are part of ILOG CP)		
ILOG Scheduler 6.1	19-Apr-2005	09-Jan-2008
(Subsequent Scheduler releases are part of ILOG CP)		
ILOG Solver 6.1	19-Apr-2005	09-Jan-2008
(Subsequent Solver releases are part of ILOG CP)		

The standard maintenance support for OPL 3.7 ended in April 2007. The following is the migration plan for OPL 3.7:

- CPLEX and OPL 3.7 - If you are an OPL 3.7 user using CPLEX, it is recommended that you move to latest version of OPL.

- CP and OPL 3.7 - If you are an OPL 3.7 user using CP, we encourage you to consider migration to OPL 5.5 and CP Optimizer. If this is not possible –this CP Optimizer release does not support scheduling with tasks and resources - then you may also request additional maintenance support for OPL 3.7 by contacting opl37-maintenance@ilog.fr.

Thank you for using the ILOG ODMS Suite of products to help you develop your optimization applications. We value your business and are committed to creating the best possible products and services to meet your needs.

Sincerely,

The ILOG Optimization Team