IBM ILOG CPLEX
Optimization Studio

Businesses struggle with unpredictable or manual decision processes, the transformation of data insights into action, and costly application development and support. IBM ILOG® CPLEX® Optimization Studio software provides powerful advanced analytics to transform descriptive data and predictive solutions into optimized prescriptive courses of action—replacing intuition and heuristic thinking with fact-based decisions.

This analytical decision support toolkit combines an integrated development environment (IDE), the Optimization Programming Language (OPL) and IBM ILOG CPLEX CP Optimizer solvers for rapid deployment of mathematical and constraint programming (CP) and of constraint-based scheduling models.

Providing high performance and scalability
Leading solver engines, OPL, an IDE with diverse model development services and a set of embedding application programming interfaces (APIs) enable continual operational improvements and a measurable return on investment as well as the scalability to solve economically significant optimization problems.

Developing and deploying new optimization-based models
Realize significant competitive gains through the ability to rapidly implement and integrate new optimization-based models to support emerging business needs.

Highlights
- Provides high performance and scalability
- Develops and deploys new optimization-based models
- Makes a difference with real-world applications
ILOG CPLEX Optimization Studio software supports comprehensive model development and deployment through its intuitive model formulation language, IDE and development services such as debugging, profiling, tuning, conflict detection and refinement, along with solvers for mathematical and constraint programming and scheduling.

Optimization models can be solved in a client–server architecture with the optional ILOG CPLEX Enterprise Server software even from the IDE, deployed into an enterprise application or used to generate interactive decision support applications with the IBM ILOG Optimization Decision Manager Enterprise platform.

Making a difference with real-world applications

- USD26 million: Amount by which a major transportation company reduced operating costs annually through better allocation of rolling stock
- USD240 million: Amount that a central securities depository saved financial institutions in 18 months by faster clearing of securities transactions
- USD66,000: Amount by which a power system operator reduced daily costs to consumers through better dispatch of generators
- USD226 million: Amount by which a major hotel chain increased annual revenue by offering the right product to the right customer at the right price

Why IBM?
IBM is a leader in the fields of operations research and optimization, offering some of the world’s most advanced analytic and optimization technologies for solving tough business and research problems.

For more information
For more information about IBM ILOG CPLEX Optimization Studio software and IBM optimization solutions, contact your IBM sales representative or IBM Business Partner, or visit: ibm.com/software/integration/optimization/cplex-optimization-studio

© Copyright IBM Corporation 2012
IBM Corporation
Software Group
Route 100
Somers, NY 10589
Produced in the United States of America
December 2012

IBM, the IBM logo, ibm.com, CPLEX, and ILOG are trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the web at “Copyright and trademark information” at ibm.com/legal/copytrade.shtml

This document is current as of the initial date of publication and may be changed by IBM at any time. Not all offerings are available in every country in which IBM operates.

The client examples cited are presented for illustrative purposes only. Actual performance results may vary depending on specific configurations and operating conditions.

THE INFORMATION IN THIS DOCUMENT IS PROVIDED “AS IS” WITHOUT ANY WARRANTY, EXPRESS OR IMPLIED, INCLUDING WITHOUT ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND ANY WARRANTY OR CONDITION OF NON-INFRINGEMENT. IBM products are warranted according to the terms and conditions of the agreements under which they are provided.