



Overview

Enterprise Optimizer® (EO) is an enterprise planning and predictive modeling platform that is used to:

- Model full financials, processes and all market constraints simultaneously without sacrificing complexity
- Deliver unique analyses (marginal profitability, forward-looking costs, non-linear continuous curves, flexible attributes), data checks, infeasibility processing, seasonality
- Provide natural language-based translation and mathematical representation requiring no programming or sequencing of equations
- Yield robust decision support, modeling flexibility, and fast scenario analysis

At the heart of EO is constraint-oriented reasoning (COR). With COR, problems can be specified in terms of constraints using an intuitive, natural language specification. The specification can combine multiple forms of constraint representation, including graphical, symbolic, quantitative, and relational. COR makes it possible for EO to quickly build accurate analytical solutions in complex problem domains.

Summary

Enterprise Optimizer (EO) is an enterprise planning and predictive modeling technology platform. It is the backbone of River Logic's corporate performance management (CPM) solutions: Integrated Business Planner™, Integrated Delivery System (IDS) Planner™, and Trade Promotion Optimizer™.

Impact

EO drives our differentiation and yields significant commercial advantages to partners and clients. We work with partners, **Independent Software Vendors (ISVs) and Management Consultants**, to create and bring to market innovative solutions that are built on, integrate with, or embed the EO platform. These collaborative solutions satisfy enterprise planning and decision-making needs, generate new revenue in existing customer base, and provide further differentiation in a vertical or functional market. By leveraging EO, our ISV and Management Consultant partners can surpass competitors that have spent significant capital building analytical offerings.

We also partner with **System Integrators (SI)** to provide our customers with top-notch consulting, integration, and implementation services. System Integrators help our customers deploy EO-based solutions to maximize functionality and rapidly achieve a return on investment. Additionally, River Logic works closely with **Platform Partners**, such as Microsoft, to maximize the performance solutions built on the EO platform and lower the total cost of ownership for customers.

We also provide EO on an **OEM license** basis. Partners can purchase the product and retail it under their brand name. This option allows partners to adjust the cost of production to the market need by delivering only functionality that is required.

Together with our partners, we're providing customers around the world with industry-leading solutions and services that address critical business needs.

Enhance Decision-Making & Improve Organizational Alignment

EO models consider an enterprise's end-to-end processes, market situation, and interdependent relationships, letting decision-makers determine the impact of their decisions throughout a company. EO replicates a company's financial reporting structure, allowing cost allocations to be easily defined; therefore, performance levels can be viewed across multiple business areas, such as departments, divisions, regional units, etc.

System Interface

Users define the planning cycle, model structure, and problem criteria based on their domain and objectives. They interact with EO via a PC application or web browser.

Graphical Model Interface

Users build EO models via intuitive drag and drop icons and pre-defined tables. The system simplifies model assembly by using eight icons to represent processes, markets, and financial activities.

Dashboards

Users can interact with EO via Visual Basic and native EO dashboards.

Scenario Management

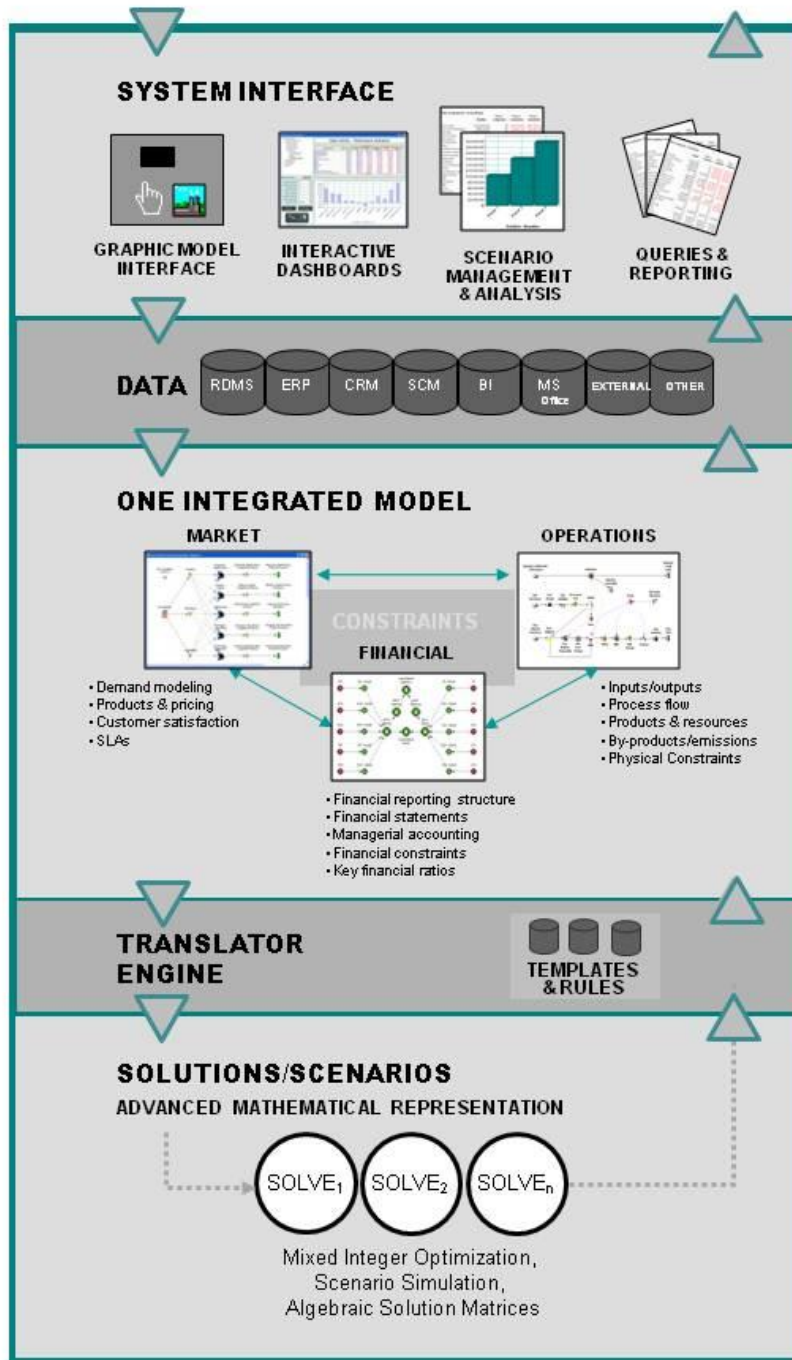
EO allows users to quickly create, store, compare, analyze, chart, and report on hundreds of scenarios.

Queries & Reporting

Users can set rules for queries and reports.

Data and Enterprise Integration

An automated programming interface (API) allows seamless integration with workflow management systems. Data can be managed automatically, including input/output from database systems, ERP, CRM, SCM, various BI systems, Microsoft applications, and other external sources. EO incorporates extensive error checking and data management capabilities for greater efficiencies. Data can be managed in a client-server configuration, through a data warehouse, or stored locally on a PC for individual use.



Users interact with EO through a multi-component system interface. Data is exchanged with a variety of sources. The application generates an integrated model and initiates the solve process by forwarding to the Translator Engine. Once there, data and rules create a math matrix and the resulting solves are fed back into the Translator Engine.

Data layers and the system interface are updated with new scenario results.

One Integrated Model

Once users structure scenarios via the system interface, the integrated model pulls the appropriate data and initiates the solve process and then forwards to the Translator Engine.

EO considers financials, markets, operational variables, and business constraints in one simultaneous representation. EO is a flexible system and can accurately represent any business process.

Translator Engine

Computation begins here. The Translator Engine recognizes the scenario and uses business rules, templates, and analyses to establish mathematical solves. The Translator Engine eliminates the need for coding, debugging, and managing formulas; therefore, users can create scenarios in minutes vs. days or weeks. The Translator Engine incorporates over 50 templates containing business rules. These rules provide the criteria and guidance required for advanced modeling.

Solutions and Scenarios

The Translator Engine produces a dynamic mathematical representation in the form of a matrix that can exceed two million rows by two million columns. EO uses advanced mathematics to conduct a number of solves on the matrix,

EO Server™

EO Server is available to companies that seek more power and want to run large, complex models to produce precise, logical decisions. EO Server is an advanced planning and mathematical modeling engine; Enterprise Optimizer resides at its core. The Service-Oriented Architecture (SOA) of EO Server allows users to quickly build solutions for multi-user environments, and advanced what-if analyses are possible through scenario management features. EO Server can solve problems with millions of constraints and variables and quickly help you determine how best to allocate resources and balance trade-offs and business constraints.

EO Server is fully integrated with Microsoft® Office SharePoint® Server (MOSS) and provides end-to-end performance management in a seamless administrative environment:

- Use a single platform to accurately represent the entire company
- Deliver unprecedented insights to users through a holistic understanding of the business
- Conduct fast “what-if” simulation and optimization analyses that accurately measure full financial impact
- Increase planning agility and make it a foundation for dynamic course correction
- Align business planning and decision-making with key performance indicator (KPI) targets and financial plans

Please contact us at **214-393-4650** or at **info@riverlogic.com** if you'd like more information on EO Server.

including mixed integer optimization, scenario simulation, opportunity value analysis, and summary and detailed unit costing calculations.

Utilizing the templates and rules, the Translator Engine updates the Integrated Model, which updates the data layers and system interface with the scenario results. These new results can be stored, analyzed, and reported. They can also be directly input into a data warehouse or execution system.

For more information, please contact us at 214-393-4650 or email us at info@riverlogic.com.

Technical Requirements

Operating Systems:

Windows Vista, Win XP SP2

Browser: IE 6.0 or higher

Minimum Hardware

Requirements:

Memory: 512 MB

Processor Speed: 1.2 GHz

Hard Drive Space: 60 MB (for program)

Recommended Hardware

Requirements:

Memory: 1.0 GB

Processor Speed: 2.0 GHz

Hard Drive Space: 5 GB (for program, models, and secondary files)

Product Licensing:

Enterprise Optimizer is available on a subscription basis; therefore, up-front purchases and investments are not required.

Enterprise Optimizer configures models and serves as the foundation for deploying broad, enterprise level solutions.

Users may be eligible for special pricing and added support by participating in the River Logic Value Added Program.

Functional Areas and Capabilities

<p>Business Analysis</p> <ul style="list-style-type: none"> • Consideration of financials, markets, operational variables, business constraints in one integrated, simultaneous representation • Optimization to any financial (e.g., throughput, inventory) or managerial metric (or multiple metrics) • What-If questions to changing assumptions or loosening constraints • Simulation analyses of impact from a range of values • Intelligent sensitivities (opportunity values) for profit • Improvement and opportunity costs of over-constrained variables • Complex inter-dependency modeling to identify maximum potential from each scenario • Infeasibility analysis of over-constrained operational and financial resources of managerial metrics (e.g., SLAs, emissions) 	<p>Financial Modeling</p> <ul style="list-style-type: none"> • Full financial reporting structure replicating a company's GL • Audit –quality income, balance sheet, and cash flow statements using GAAP accounting • Financial, budget (vertical and horizontal) consolidations, including beginning balance • NPV, Economic Profit and all other financial ratios at corporate and division levels • Detailed unit costs and profitability by customer, products, resource, channel partner, and facility (includes ABC) • Resource utilization and implications on unit costs and profits • Capital expenditure allocation and optimization • Transfer cost and tax planning • Full and partial ownership of assets • Working capital management • Sources and uses of cash (treasury) • Multiple currencies in a single model with automatic conversion • Customized depreciation schedules • Customized aging of accounts and inventory value
<p>Market Modeling</p> <ul style="list-style-type: none"> • Linear, non-linear and step-change price and demand curves • Contractual commitments and SLAs as constraints • Competitor financial structures, potential actions, and impact on prices and demand • Purchase and sale of by-products and intermediate products 	<p>Visual Diagram and Model Management</p> <ul style="list-style-type: none"> • Intuitive drag and drop interface • Automatic propagation of categories through the model (e.g., material names, locations) • Visualization of business constraints and material flows • Automatic propagation of constraints (e.g. min/max)
<p>Process Modeling</p> <ul style="list-style-type: none"> • All inputs and outputs, including by-products and emissions • Resources (personal, physical) and activity • Batch and continuous process flows • Conditional minimums • Production sequencing • Pooling of inventory and resources • Full mass/energy • Full and partial-load transportation • Inventory (LIFO, FIFO), holding cost degradation, and shrinkage • Product mix analysis and optimization • Resource open/close decisions • Network design and optimization 	<p>Data and Error Checks</p> <ul style="list-style-type: none"> • Full consistency check for names, labels, units/unit conversions and constraints • Identification of unconnected graph elements • Flagging of mutually exclusive and/or infeasible conditions • Flagging of pre- and post-solve imbalances in financial accounts • Checking and application of factors and adds to a given variable • Mathematical checks and automated error correction of problems related to scaling issues, computational efficiency and others