Impact2010
The Premier Conference for Business and IT Leaders
Discover. Interact. Optimize.

Optimization & Supply Chain Solutions Preview

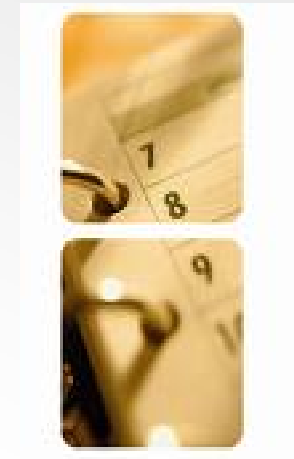**Aimee Emery-Ortiz, WW SCM Marketing**
aeo@us.ibm.com

Agenda

- Value Proposition
- Featured Industry Solutions
- Featured Sessions
- Featured Demos

The Value of IBM ILOG Optimization and Supply Chain Solutions

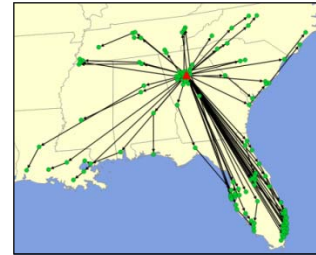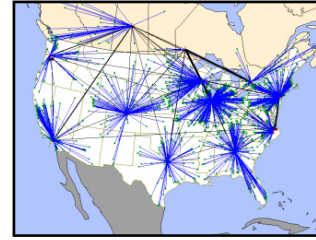## *Smarter Decisions for a Smarter Planet*

- **Better**
  - Get better performance for lower cost
  - Find non-obvious solutions for complex decisions
  - Produce quantifiable benefits to the bottom line
- **Faster**
  - Automate decision processes consisting of many alternatives
- **Greener**
  - Discover interactions among environmental impacts and business drivers
  - Realize opportunities to more efficiently operate a business in a better way

- **Turn information and insights into action**
  - **IBM ILOG Optimization and Supply Chain Solutions leverage the investments you are making in enterprise information technology and business automation**

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IBM ILOG Supply Chain Applications
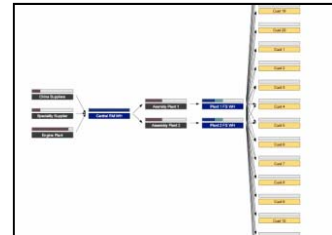
Strategic Supply Chain Planning

- *LogicNet Plus* (**LNP**) - Network design and planning
  - Determine optimal number, location, territories, and size of warehouses, plants, and lines
  - Analyze production sourcing and carbon footprint
- *Transportation Analyst* **(TA)-** Transportation planning
  - Strategic routing for fleet sizing, load consolidation, backhauls, mode/carrier selection and more

SAP®Certified
Integration with SAP Applications

Enterprise Inventory Planning

- *Inventory Analyst* (**IA**) – Inventory Planning
  - Maintain correct inventory levels on an on-going basis by integrating directly with your ERP system
  - Determine push/pull and buffer locations
  - Optimize product flow to customers

Production Planning and Detailed Scheduling

- *Plant PowerOps* **(PPO)**
  - Planning and detailed scheduling for process plants
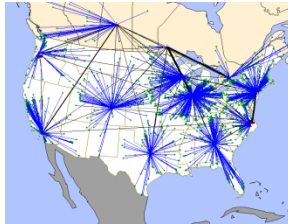 - Strategic and tactical process design

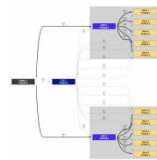# ILOG Optimization and Supply Chain Solutions for Retail

- **Network optimization** for location of facilities, assignment of stores, managing seasonality, and carbon footprint. Value: 5-15% reduction in supply chain costs, better service to stores

- **Transportation optimization** for routing analysis, static and dynamic routes, backhaul, and fleet sizing. Value: 10-30% reduction in transportation costs, better make delivery windows

- **Inventory and product flow optimization** for flow path optimization, service level optimization, buffer locations. Value: 10-30% reduction in inventory costs, better fill rates.

- **Replenishment optimization** for determining how much and when to buy to trade off discounts and inventory. Value: 3-5% reduction in procurement costs
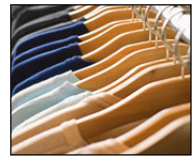

- **Space planning** to determine the best layout of products in the store. Value: increase in sales

- **Work force scheduling** for determining optimal schedule given all relevant constraints Value: Reduction in labor costs

- **Assortment allocation** for determining how to distribute same item with different sizes to the stores. Value: Increases sales of items with multiple sizes

ILOG Optimization and Supply Chain Solutions for CPG

- **Network optimization** for location of facilities, assignment of stores, managing seasonality, and carbon footprinting. Value: 5-15% reduction in supply chain costs, better service to stores

- **Sourcing optimization** for on-going multi-plant production sourcing and capital investment decisions. Value: enhanced S&OP capability, 2-5% reduction in manufacturing costs
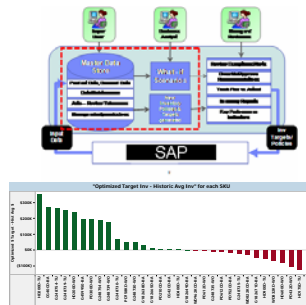

- **Transportation optimization** for routing analysis, static and dynamic routes, backhaul, mode selection, and fleet sizing. Value: 10-30% reduction in trans costs

- **Scheduling optimization** for determining best schedule in process environment. Value: improved throughput, reduction in costs, reduction in inventory, leaner plants

- **Enterprise multi-echelon inventory optimization** for integrated inventory planning within your ERP system. Value: 10-30% reduction in inventory costs, better fill rates.

- **Strategic multi-echelon inventory optimization** for analysis to determine strategic shifts in your inventory policies and practices. Value: 25-50% reduction in inventory
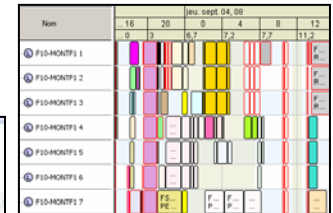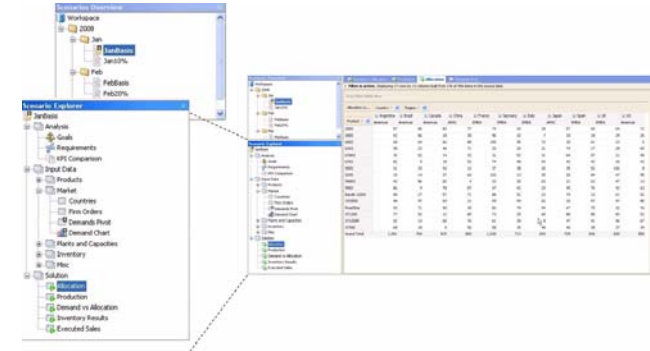
ILOG Optimization and Supply Chain Solutions for Automotive and Aerospace

- **S&OP**. Collaborative optimization environment for making complex decisions around product line and market requirements. Value: Pull various functions together to review and approve optimal plans

- **Vehicle Sequencing**. Determine the optimal sequence of vehicles through the plant considering set-up constraints. Value: $10-$20M reduction in inventory; $3-$7M reduction in costs; 10-20% reduction in purge rates.

- **Complex scheduling** . Provides scheduling in manufacturing environment that is more like a project (airplanes, boats, complex machinery). Value: Increased coordination and ability to complete project on time (the costs in this environment are dependent on on-time completion)

ILOG Optimization and Supply Chain Solutions for Transportation
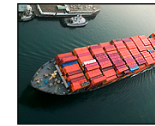

Ocean

Trucking

- **Vehicle routing and asset scheduling** for determining best routes and scheduling the workforce and trailers. Value: Reduced cost

- **Network optimization** for their clients to develop the right network. Value: adding value to their offering

- **Ground staff scheduling and gate allocation** for optimal . Value: 10-30% reduction in inventory costs, better fill rates.

Air

- **Port scheduling and optimization** for determining manpower requirements, scheduling ships, handling port logistics (like crane assignment) and loading and unloading. Value: increased throughput, ability to handle many conflicting objectives

- **Container optimization** to determine how to best position containers for a shipping line. Value: reduced container movements and better service

- **Operations optimization** for multiple applications around network planning, capacity utilization, rail and crew scheduling, and maintenance. Value: reduced costs, reduction in delays, improved throughput, and reduced empty miles

Rail

Featured Sessions

- Building the Smarter Supply Chain of the Future
  - *Karen Butner, IBM Institute for Business Value*

Why Should You Attend?

Turn insights into action. Learn about key issues that top supply Chain executives are dealing with and how to solve them. Based on the Worldwide IBM Supply Chain Study.

Featured Sessions

Combating Volatility through Flexibility
- *David Simchi-Levi, ILOG Chief Scientist and professor at MIT*

Why Should You Attend?

Is there enough "Flex" in your Supply Chain?
Do your strategies reduce costs and working capital while allowing you to better respond to changes in demand volume and mix, exchange rates, technology or labor costs? Learn how to implement strategies that allow firms to cut costs while at the same time prepare for growth.

Featured Sessions

- Creating Value in a Volatile World: The Role of Information Technology
    - *David Simchi-Levi, ILOG Chief Scientist and professor at MIT*

Why Should You Attend?

Turn insights into action. Understand the vital connection between business strategy and IT investments and the role that IT can play in addressing today's challenges while preparing for tomorrow's opportunities.

Featured Product Demonstrations

- Flexible Supply Chain in Merchandising & Retail
- Network Design & Planning
- CO_2 Reduction
- Strategic Transportation Planning
- Inventory & Product Flow Optimization
- Production Planning & Detailed Scheduling
- Tax Efficient Supply Chains