IBM ILOG Transportation Analyst

Highlights

■ *Analyze different transportation strategies to find the best solution*

■ *Optimize routing, shipment consolidation and asset usage*

■ *Answer strategic transportation questions*

■ *Cut costs and improve service levels*

Need for economical solutions

To reduce shipping costs and improve service levels, companies must thoroughly analyze their transportation network strategies and compare multiple what-if scenarios. Existing transportation solutions focus on operational constraints and are typically too complex for strategic applications, while spreadsheet analysis is too limited to find the most economical solutions.

Key questions for improving shipping

Companies that regularly transport materials or goods, such as retailers, shippers and manufacturers have several key questions they need to answer: What are the best routes? What are the opportunities for combining shipments and finding continuous moves? Which shipments should use private fleet, commercial truckload or less than truckload (LTL)? What size should the fleet be? What is the impact of backhauls? How can running inbound and outbound transportation together save additional money? How does a new network strategy impact the routes, multi-stops and transportation operations? How do we take advantage of hubs?

Determine the best transportation strategy

IBM® ILOG Transportation Analyst answers these questions by providing the ability to quickly analyze different strategies and find the best plan to deliver products and utilize transportation assets. Assigns shipments to

vehicles and sequence pickups and deliveries with the objective of minimizing costs while adhering to business and regulatory constraints. In short, companies deliver more reliably and accurately for less with IBM ILOG Transportation Analyst.

- *Analyze transportation strategies for the best solutions*
- *Optimize routing, shipment consolidation and asset usage*
- *Answer strategic transportation questions*
- *Cut costs and improve service levels*

Balance costs and service in complex shipping networks

IBM ILOG Transportation Analyst determines optimal load consolidation, route sequences and shipping schedules. The application lets you set constraints and manage data while visualizing schedules and assets. IBM ILOG Transportation Analyst creates state-of-the-art transportation plans for multisite, multitier distribution networks, taking full advantage of routes, shipment consolidation and backhauls to optimally use available capacity.
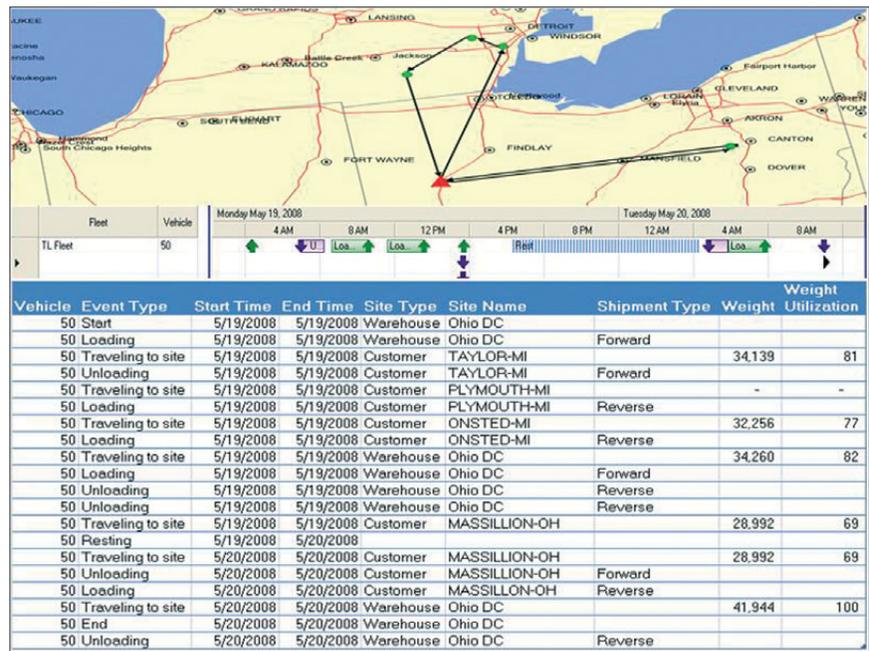
Manage transportation resources through detailed interactive graphics

Vehicle	Event Type	Start Time	End Time	Site Type	Site Name	Shipment Type	Weight	Weight Utilization
50	Start	5/19/2008	5/19/2008	Warehouse	Ohio DC			
50	Loading	5/19/2008	5/19/2008	Warehouse	Ohio DC	Forward		
50	Traveling to site	5/19/2008	5/19/2008	Customer	TAYLOR-MI		34,139	81
50	Unloading	5/19/2008	5/19/2008	Customer	TAYLOR-MI	Forward		
50	Traveling to site	5/19/2008	5/19/2008	Customer	PLYMOUTH-MI		-	-
50	Loading	5/19/2008	5/19/2008	Customer	PLYMOUTH-MI	Reverse		
50	Traveling to site	5/19/2008	5/19/2008	Customer	ONSTED-MI		32,256	77
50	Loading	5/19/2008	5/19/2008	Customer	ONSTED-MI	Reverse		
50	Traveling to site	5/19/2008	5/19/2008	Warehouse	Ohio DC		34,260	82
50	Loading	5/19/2008	5/19/2008	Warehouse	Ohio DC	Forward		
50	Unloading	5/19/2008	5/19/2008	Warehouse	Ohio DC	Reverse		
50	Unloading	5/19/2008	5/19/2008	Warehouse	Ohio DC	Reverse		
50	Traveling to site	5/19/2008	5/19/2008	Customer	MASSILLION-OH		28,992	69
50	Resting	5/19/2008	5/20/2008					
50	Traveling to site	5/20/2008	5/20/2008	Customer	MASSILLION-OH		28,992	69
50	Unloading	5/20/2008	5/20/2008	Customer	MASSILLION-OH	Forward		
50	Loading	5/20/2008	5/20/2008	Customer	MASSILLON-OH	Reverse		
50	Traveling to site	5/20/2008	5/20/2008	Warehouse	Ohio DC		41,944	100
50	End	5/20/2008	5/20/2008	Warehouse	Ohio DC			
50	Unloading	5/20/2008	5/20/2008	Warehouse	Ohio DC	Reverse		

Functionality

IBM ILOG Transportation Analyst offers:

- *Multiple transportation modes for private fleets with multi-stops, commercial truckload with zone-to-zone rates and integration with SMC Rateware for LTL tariffs*
- *Multiple shipment types for forward shipments in addition to reverse shipments (backhauls) and cross shipments from one customer to another*

- *Integration with PC Miler for distances and travel times*
- *Consolidation and deconsolidation hubs*
- *Flexible mapping and Gantt charts to show vehicle and site schedules*
- *Detailed reports and scenario comparison reports*
- *Tight integration with Excel and Access*

Key business benefits

IBM ILOG Transportation Analyst helps companies address many key business objectives, including:

- **Utilize transportation assets efficiently:** *Determine the most efficient use of private fleet to deliver shipments*
- **Determine the correct transportation mode:** *Assign shipments to private fleet, commercial truckload or LTL to minimize total cost*
- **Examine the cost and benefits of business rules:** *Perform what-if scenarios to test different rules for pickup and delivery windows, delivery frequency and vehicle rules*
- **Analyze impact of new network design:** *Determine the impact on fleet size and multi-stop routes for new network structure*
- **Explore opportunities for maximizing backhauls:** *Use returning vehicles to transport goods*

- **Analyze the impact of using consolidation or deconsolidation hubs:** *Determine the advantages of using central distribution centers (DCs) and/or satellite DCs to cut costs and increase service levels*

Complete product support

IBM ILOG Transportation Analyst is backed with:

- **Transportation optimization expertise:** *Experts in constraint and mathematical programming and experience from successful transportation and dispatching products*
- **Complimentary planning products:** *IBM ILOG LogicNet Plus® for strategic network planning, IBM ILOG Inventory Analyst for multi-echelon inventory optimization and data models that help users to ramp up quickly*

- **IBM Software Consulting Services:** *Supply chain consultants with backgrounds in the transportation industry and experts in modeling and optimization*

About IBM ILOG Supply Chain Applications

Leading ILOG optimization technology and LogicTools® expertise and experience in supply chain management come together in this powerful suite of applications for network design, production sourcing, inventory optimization and transportation planning, in addition to production planning and scheduling. Complement your ERP systems and make better decisions faster to optimize logistics networks and transportation strategies, set safety stock levels for sales and operations planning and improve plant operations in fast-paced industries. Learn more at http://supplychain.ilog.com.

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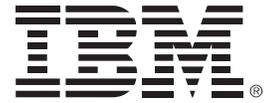
For more information

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Transportation Analyst, please contact
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IBM Business Partner, or visit the fol-
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products/transportationanalyst/
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