What can ALNM do for you?

- Analyze costs of a logistics network
- Optimization of a logistics network
- Analysis of geographical location of the network object
- Identify bottlenecks in the network
- Optimization of inventory sizes
- Optimization of multiple scenarios

Why ALNM?

- Simulation based approach that can handle your network specifications
- State-of-the-art optimization algorithms
- “What-if” analysis
- Risk and change management
- Guaranteed results

AnyLogic Logistics Network Manager – solution for management, optimization and analysis of logistics networks

AnyLogic Logistics Network Manager (ALNM) allows you to optimize, analyze, manage and visualize logistics networks, including production facilities, terminals, warehouses, retailer and transport. You have the ability to analyze all possible logistics scenarios and choose the best solution for your firm, using ALNM. The system can also support operational decisions, such as changes in transportation costs, sales volume fluctuations, natural disasters and other “what-if” scenarios.
AnyLogic Logistics Network Manager

**HOW ALNM WORKS**

**ALNM: How It Works**

Based on the demand forecast for each SKU, ALNM simulates your logistics network utilizing identified boundary conditions, specific details and dynamics of a particular system. For example,

- Real dynamics of a demand with all possible fluctuations (not just average)
- Properties of inventories and re-ordering rules
- Transport facilities and their characteristics
- Various types of expenses (staff, transportation, storage, protection, insurance, etc.)
- Retail prices

Using simulation models, the ALNM system predicts how the logistics network will act in the future and calculates the metrics required by a manager for better decision making.

**ALNM optimization goals**

- Minimize loss due to stock-out
- Minimize logistics expenses
- Maximize service level

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Our clients

- Boeing
- FedEx Express
- Cardinal Health
- CSX
- GE
- John Deere
- KIVA Systems
- Lockheed Martin
- Tran Systems
- USAA
**WHY ALNM?**

**Simulation based approach**
ALNM’s distinctive feature is the use of simulation models to reproduce the behavior of a real system. The simulation model includes specific characteristics, limitations, and uncertainty, then in addition, captures unexpected dynamics, unlike typical mathematical models.

**State-of-the-art optimization algorithms**
Optimization with simulation-based support requires distinct algorithms. These algorithms work with any type of parameters such as continuous, discrete, enumerable and probabilistic then adjust for a particular problem and minimize time spent finding a solution. The algorithms in ALNM are backed by years of experience in optimizing logistics networks and simulation modeling, with a proven track record of success.

**“What-if” analysis**
The ALNM system can complete any variety of experiment in order to test assumptions or proposition of change. For example, “If you build a new distribution center in New York, what is the effect on your logistics expenses?” or, “Is it more advantageous to deliver goods from Chicago to New York by rail versus trucks?” Thanks to the interactivity of ALNM, management may apply all the limitations and unexpected changes that occur in real life to find the optimal solution and make more profitable decisions.

**Risk analysis**
It is imperative that simulation modeling considers stochastic characteristics of a system since there is risk associated with decision making and a probability that the expected results will not occur. This feature allows you to analyze the result considering all variables within the model as well as changes in input parameters, ultimately calculation the risk associated with a decision.

**Guaranteed result**
AnyLogic is the world leader in simulation modeling and optimization. Our software and services are an integral part of many globally recognized, Fortune 500 firms in over 64 countries. Our impeccable reputation guarantees you success.
ANYLOGIC LOGISTICS NETWORK MANAGER

- Reproduce detailed behavior of the logistics network by means of simulation modeling
- “What-if” analysis
- Interactivity
- Any boundary conditions
  - Routes
  - Transport facilities
  - Own transport facilities and rented
  - Operating schedule
  - Limitation related to terminals, warehouses, retailers
- Various levels of detail
- Analysis of outsourcing options
- Linkage to the geographical information
- Full cost analysis
  - Investments in change or modification of existing processes
  - Staff
  - Rent
  - Storage
  - Transportation
  - Cost of goods
  - Protection
  - Insurance
- Estimation of sales and loses
- Detailed information regarding system goals
  - Utilization
  - Volume
  - Staff
  - Service level
- Comprehensive inventory data
  - Quantity of goods in the system, by object by SKU
  - Losses because of deficit by object by SKU
- Indepth transport facility statistics
  - Number of vehicles by type (rail cars, trucks, vessels etc.)
  - Number of rented vehicles by type
  - Number of warehouses, terminals, stores served by a type of vehicles
  - Utilization of vehicles
- Logistics network visualization on the map
  - Exact geographic locations
  - Route adjustment in a simulated environment

Contact info

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