



In today's competitive business environment, efficient utilization of the company resources where the mobile workforce is one of the most expensive ones is a necessity for long-term competitiveness. Blå Optimizer provides functionality that makes it possible to optimize the utilization of mobile staff even in very fast-changing and dynamic operations

isMobile

isMobile develops Workforce Management applications enabling companies to shorten lead times, increase productivity and reduce cost through bringing access to corporate data and processes to where ever it is needed, as well as enabling advanced scheduling and optimization support.

Optimize Your Service Commitments

Blå Optimizer is a state-of-the-art, intelligent and flexible scheduling engine that allocates different types of assignments (Service Orders, Work Orders), in a way that matches your business needs. It makes it possible for your field service organization to operate with maximum efficiency in areas like:

- Delivering optimal customer service with the current resources available.
- Utilizing your resources (technicians, engineers, call centre personnel, dispatchers and others) as efficiently as is possible.
- Meeting service commitments and agreed bookings.



Blå Optimizer can use travel distances and expected road travel times to find the best situated resource for a new assignment. In addition, it also utilizes the skills of your personnel. By using advanced algorithms, the Blå Optimizer engine considers the entire schedule in real-time and plans with the goal to minimize your costs and maximize your service response. Real-time status updates also allow the Blå Optimizer to re-schedule when situations occur that are not planned (e.g. traffic jams, illness, extended assignments etc.)

Work Scheme Optimization

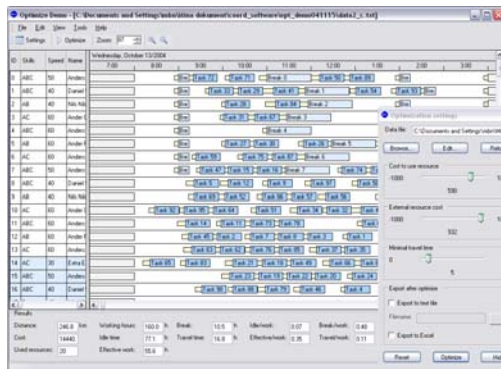
Blå Optimizer is easy to use and supports three different methods of work scheme optimization:

- Manual scheduling
- Automatic decision support for addition of work orders
- Automatic decision support that re-schedules existing work orders.

Dependent on type of business operation and current usage of work scheme scheduling, it is possible to begin with manual scheduling and successively upgrade to more advance scheduling support.

In order to implement automatic decision support in Blå Coordinator, isMobile has developed an optimization engine, Blå Optimizer that solves the general optimization case for field service scheduling. The optimization engine has been designed to be fast enough for interactive use and still be able to produce optimal or near optimal solutions. Using state of the art techniques and algorithms developed by such names as Marius M. Solomon and Olli Bräysy the optimization engine is able to produce high quality solutions in mere seconds.

Since the actual optimization support might be dependent on specific parameters for each service company, the optimization support is developed as a plug-in that can be adapted and developed in a separate project.



Automated Work Order

When the work scheduler use the optimizing decision support for new work orders that should be added to an existing schedule, the optimization engine search through the existing work scheme to propose the most efficient alternatives, usually with the goal to minimize travel cost and match skill needs. The work scheduler decides then which alternative to use and the work scheme is updated automatically.

For companies with frequent changes of the work schedule, the utilization of re-assign functionality in combination with optimizing decision support increases the quality & efficiency tremendously. The optimizing decision support utilize existing work schedule and consider all existing assignment as new work orders and make new assignment for available resources.

Automated Work Order

The objective for the optimization is to minimize travel cost considering a number of constraints:

Time window constraint. Each work order may be given a time window, which determines the earliest and latest time that the work order may be performed.

Resource availability constraints. Each resource has specified available working time.

Compatibility constraints. You may define compatibility rules that tell which work orders may be performed by which resources, e.g. skill set.

Travel speed constraint. The standard way to estimate drives times in the optimization is to use the shortest distance between locations and an average speed. Each optimization is based on a specified speed.

Partner Strategy

isMobiles strategy is to sell its products through best in class partners, focusing on different industries and segments

