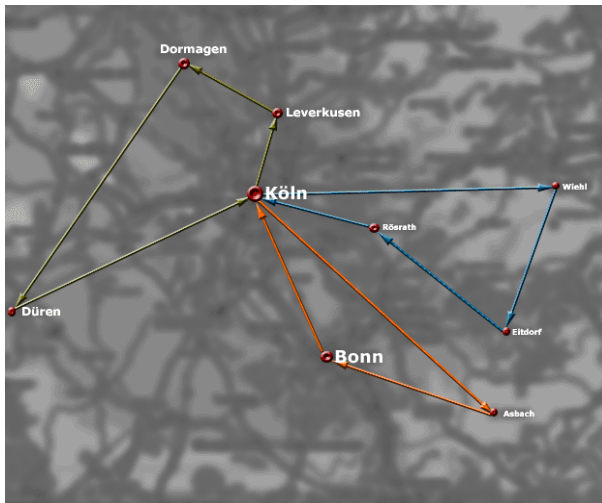


Facts Sheet - *JOpt.FieldService*

Overview



JOpt.FieldService brings field service application knowledge to the J2EE and SDK components out of the comprehensive set of *JOpt* tools. This enhancement kit use the base components *JOpt.J2EE* or *JOpt.SDK* and adds all necessary knowledge of dispatchers in field service tasks.

JOpt.FieldService tailors the genetic algorithms of the base components and calculates an optimized allocation of field service jobs to a number of technicians. The algorithm allocates the jobs to the resources achieving minimum overall costs baut taking into account an arbitrary set of constraints for each resource. The

constraints are easily modifiable so that individual business processes can be represented.

JOpt.FieldService will propose its solutions for daily dispatching optimization in the following way:

- Field Force
 - JOpt.FieldService* finds the maximum utilization of technicians with service jobs given a set of service jobs. It will automatically assign all jobs to the available resources or technicians. The proposed solution will optimize
 - Job assignment: which technician should take over which service job
 - Job sequence: which is the optimal sequence to do the jobs
- The algorithm considers:
 - time constraints at every service stop, i.e. when to be at the stop and for how long
 - daily and weekly technician working times
 - ad hoc service jobs and their integration into the work schedule
 - driving times to and approximate working at the service object
 - technician skills for the specific job
 - material check

JOpt.FieldService enhancement kit will

- support dispatchers at planning and deploying service technicians
- generate and modify frame tours
- calculate costs for each tour
- interfaces with time schedule visualization programmes

ERP software developer may integrate the *JOpt.FieldService* and the base components *JOpt.SDK* or *JOpt.J2EE* into their solution frame in order to offer their customers a consistent solution including optimization of field service schedules. A seamless integration into your software ensures the look and feel of only one piece of software to your customer. Developers will use the easy integration mechanisms offered by the J2EE java frame, such as the Oracle Application Server or similar frameworks.

JOpt.FieldService's optimization criteria may be changed in order to allow for suitable customization to specific technician deployment planning problems. Possible modification will change default optimization goals or number and weight of constraint violations.

Highlights

- Tour- and job sequence allocation optimization package
- Customizable optimization and constraints properties
- Customizable distance matrix, derived from arbitrary sources
- Working time rules of your technicians
- Virtually unlimited number of service tours and technicians

Properties of the *JOpt.J2EE* or *JOpt.SDK* base product:

- Webservice interface for service oriented architectures (SOA)
- Scalable
- Flexible genetic algorithms
- J2EE compliant

Interfaces and Runtime Environment

JOpt.FieldService will bring service dispatching knowledge to the *JOpt.J2EE* and *JOpt.SDK* components. Use the interfaces of the base components to interact with other services in your enterprise software architecture or in the web. These interfaces will ensure a simple and seamless integration into existing software frameworks.

