

Comments of the organizers on the record
of problem E, contest of 2011

date: January 30, 2012

time: 3586 msec, speed-up: 5.90

Shared-memory and message-passing parallelism are combined. The complete system is used, with 1 process per node (4 processes), and 8 threads are generated in each process.

Initially a process generates tasks up to a level of the backtracking tree at which there are enough tasks for all the threads. The tasks are distributed to the other processes, which perform local backtracking and send back the local optimum solution to process 0. Process 0 obtains the global optimum.

The speed-up is low, but the cost of communications can be high, and for this type of problems the number of eliminated nodes greatly influences the result.