

Capacitated Vehicle Routing Problem (cvrp2)

— [Run LPL Code](#) , [HTML Document](#) —

Problem: A fixed fleet of delivery vehicles of uniform capacity must service known customer demands for a single commodity from a common depot at minimum transit cost. An concrete application is given in [cvrp](#)¹. The models [cvrp-1](#)², [cvrp-2](#)³, and [cvrp-3](#)⁴ give MIP-formulations of the problem. Formulate this problem as a permutation problem⁵.

References

- [1] MatMod. Homepage for Learning Mathematical Modeling : <https://matmod.ch>.
- [2] Hürlimann T. Various Model Types. <https://matmod.ch/lpl/doc/variants.pdf>.

¹<https://lpl.matmod.ch/lpl/Solver.jsp?name=/cvrp>

²<https://lpl.matmod.ch/lpl/Solver.jsp?name=/cvrp-1>

³<https://lpl.matmod.ch/lpl/Solver.jsp?name=/cvrp-2>

⁴<https://lpl.matmod.ch/lpl/Solver.jsp?name=/cvrp-3>

⁵For a definition of *permutation problems* see [2].