

2. Combinatorial Auctions Project

□ Requirements

STS

- A shipper can announce a set of goods to be transported to different locations.
- Transport agents can bid for subsets of goods and will get some goods to be shipped.
- Transport agents can then cooperate to fulfil their contracts and shorten their routes through a combinatorial auction. The goal is to optimize the net profit of the collaborative agent society.
- Simulation environment that shows the actions of the auction, auction outcome, initial routes, routes after cooperation.
- Interface for creating and executing the auction.
- Use some existing software to find “optimal” routes is recommended. Thus, more than one solution is possible by integrating different versions.