

Transport Telematics

Winter semester 2019/2020



Lab 3

Routing

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Certification	1 st check	Resubmission until	2 nd check

Task

For the application **Routing** of our fleet management system, the optimal route of every vehicle has to be calculated (based on the geodatabase being completed in WP 200). A vehicle should start at the distribution center (Depot) and deliver goods to several customers (Orders). There are two vehicles available which have to supply 13 customers. By using the ArcGIS Network Analyst, optimized routes will be calculated while delivery costs are minimized.

Procedure

Execute following steps:

1. Create a feature dataset
2. Create a network dataset
3. Check the functionality of your network
4. Load the list of customers and define a distribution centre's location
5. Start the vehicle routing problem

More information: See Power Point slides!

The written elaboration has to contain:

- a brief documentation of the exercise
- the total time and total distance of every route (vehicle)
- a printout of the calculated routes of the two vehicles, the location of the distribution center and the customers (with North arrow, Grid and Scale Bar)

Weblinks

ArcGIS Resource center

<http://help.arcgis.com/en/arcgisdesktop/10.0/help/>

(Resource center >> Professional Library >> Extensions >>
Network Analyst >> Guide books >> A rcGIS Network Analyst Tutorial)