

Fachprojekt 2

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kWPO-JointHeur: Find improving topo

- kWPO-JointHeur: Possibly add multiple waypoints per demand
- Aim: Find a topology where kWPO-JointHeur is better than simple JointHeur
- Idea: Randomly generate and expand network instance until the algorithms give us the needed relation
 - No results yet

kWP per Topology: Bad Example

Idea from project 1: Limit the number of usable waypoints throughout the complete run of the algorithm for a topology to $k \in \mathbb{N}$

Results from Project 1:

- (Obviously) restriction of usable waypoints make MLU only worse
- \Rightarrow In best case, kwp per topology is only as good as JointHeuer

So, show that idea from project 1 is as bad as possible...

- after setup(adjustments), use Joint-Topology
- use small values for k

kWP per Node: Remove waypoint

Idea from Project 1: Each Node can only be used as a waypoint a finite number of times

- Counter k for each Node can be defined homogeneous or heterogeneous
- Practical: Some nodes where banned ($k = 0$)

Results from Project 1:

- A smaller waypoint pool is not necessarily worse, because the elements are different
- We should find a way which nodes should be banned

Idea for Project 2

- By removing a waypoint from the given JointHeur-Topology the result will be worse
- To do: Evaluate different number of blocked waypoints