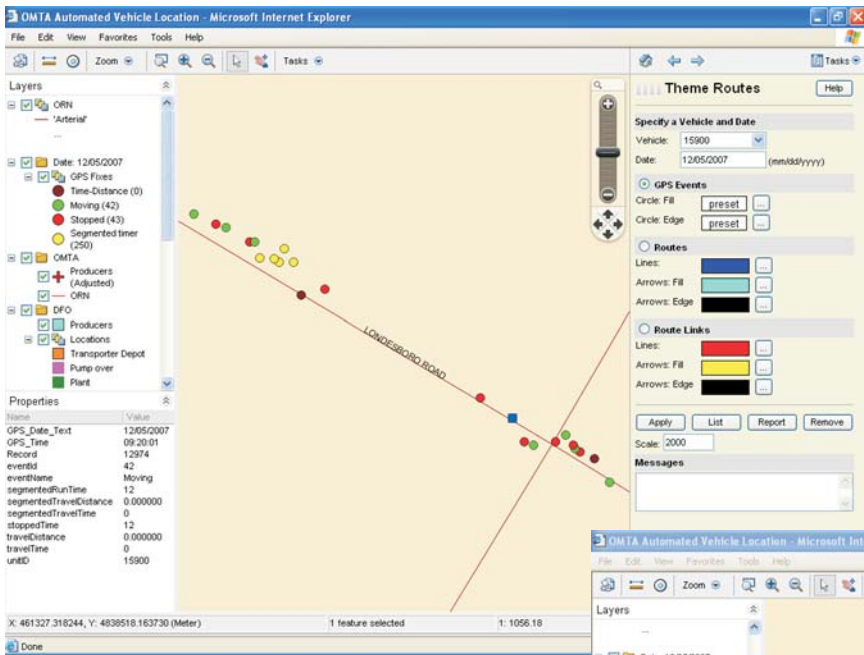


# Open Source

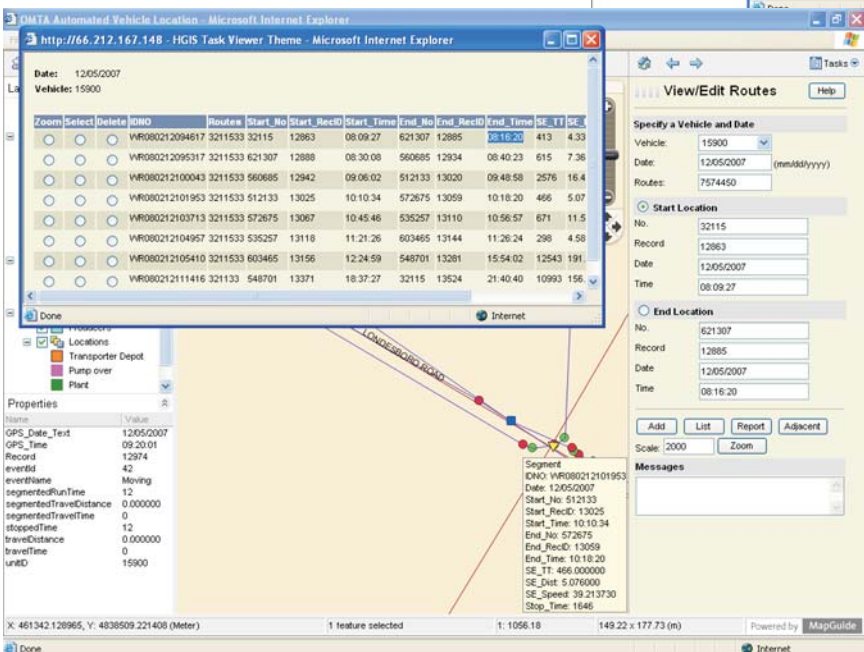
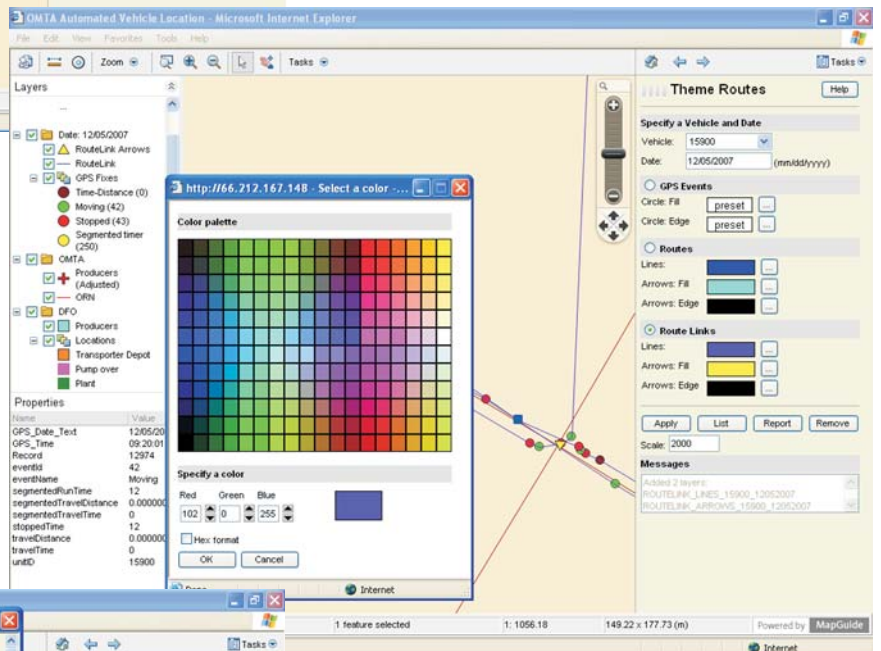
# Automatic Vehicle Location Solution



- GPS event data is downloaded from tracking devices and read into database.
- GPS event data forwarded from providers and detected by UDP listener on HGIS servers and written to SQL server databases.
- Theme location GPS event data (points) by event type for specific date and vehicle ID (eg. stopped, moving, time-distance, segmented-timer).
- Generate route lines from GPS event data points.

Hunter GIS works with Automatic Vehicle Location (AVL) techniques to provide efficient vehicle tracking, function, safety, route optimization and transport rate support solutions.

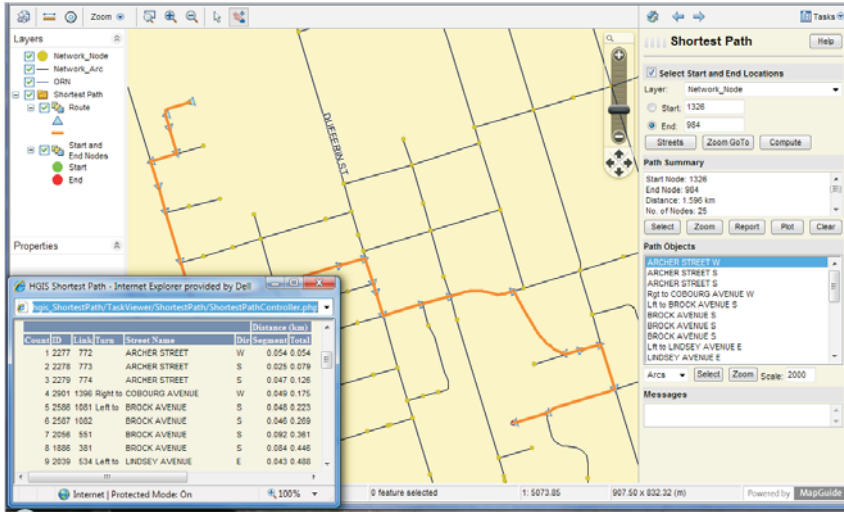
The AVL solution provided by Hunter (HGIS) merges GPS data into a single server database. Utilizing locations themed for a specific date and vehicle identification number, an operator is able to interactively select points along a route representing pick-up and plant drop-off. Saved route information can be reported in order to assess the efficiency of the delivery system and set transport rates.



- Theme location GPS event data (points) by entering relational query.
- Interactively select start and end points at route segments (ie. plant-to-depot, pickup-to-plant, pickup-to-pickup).
- Zoom goto function (producers, plants).
- Daily report summary, indicating travel distance and time, stop time and average speed.
- Developed for MapGuide Open Source/Enterprise.
- Support for Oracle and SQL Server

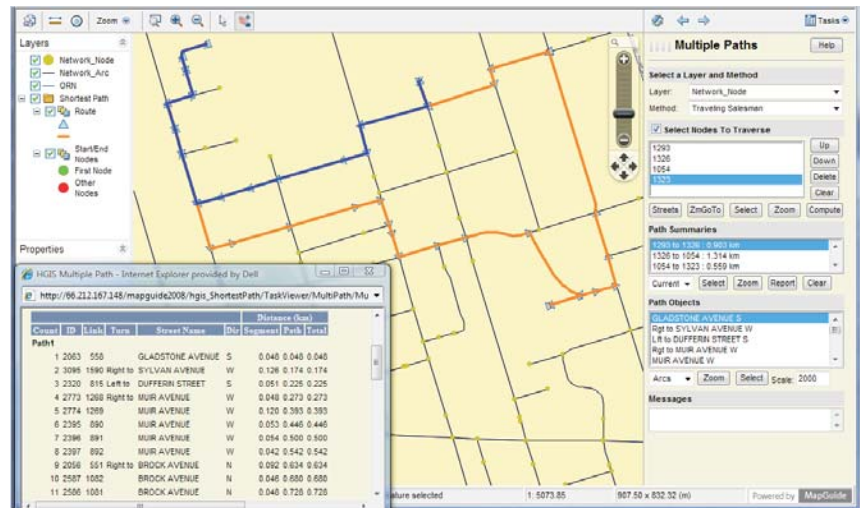
# Open Source

# Shortest Path



The Hunter GIS Shortest Path Solution for Autodesk MapGuide permits a web-based method of determining the minimum traveled path along a network (roads) between start and end locations (e.g. the shortest distance between two points).

- Determine optimum route for:
  - node-to-node
  - traversal through a set of nodes in order
  - one-to-many
  - many-to-one
  - many-to-many
  - solution to the Travelling Salesman Problem (TSP) in which an efficient route is found that minimizes the traversal of a series of nodes
  - snap function to extend the network to calculate paths between points not located on the network



- Web-based access to maps and GIS data to provide spatial reference
- Links to related databases (Hazardous Materials and Emergency support)
- Multi-function hyperlinked on-screen (incident) reporting
- Tool tip viewing of map feature attributes
- Integrated Street Intersection Zoom Goto function
- List Streets function for rapid address-based queries
- Developed for MapGuide Open Source/Enterprise.

