

PTV MapServer

Mapping & Routing for Desktop Software

PTV MapServer provides extensive mapping and routing functionality as well as user-friendly logistics optimisation. For integration with desktop software solutions in Windows.



Technology and integration

PTV MapServer can be used anywhere you need to simply and seamlessly integrate digital maps, address geocoding and validation, routing, toll and emission calculation. Extensive code samples included in the package. PTV MapServer is intended to be run with local desktop software in Windows.

It supports the following database formats for integrating your own addresses: Oracle, SQL, Access. The COM interfaces give you ready access to all the functions using standard programming languages. No special hardware is required. 1GB RAM is recommended. Up to 500 MB hard drive space is needed per country map. PTV MapServer supports Windows 2000, 2003, XP and Vista (32-bit).

Mapping

- Interactive map display
- Zoom and pan around maps quickly
- Print and export maps (BMP, WMF, GIF, JPG, EMF)
- Display individual lines, dots, areas (such as routes, locations, sales territories)
- Show customer addresses, sites, etc. with freely selectable logos
- All objects can be selected with a mouse-click
- Map look and feel is fully customizable
- GIS layers: display and edit your own geometries
- GeoGrid Viewer: this add-on module can integrate grid maps using the EADS format (generally third-party digital map material)

Routing

- Calculate the route, road distance, travel time and travel costs
- Unlimited number of stop-off points
- Fastest / shortest routes available
- Create customized vehicle profiles (not just truck and slow car, but also bicycle, pedestrian, etc.)
- Generate route lists
- Route list available in 10 languages (English, German, French, Spanish, Dutch, Italian, Portuguese, Swedish, Danish, Norwegian)
- Integrate and leverage traffic information (requires additional data)
- Utilize certain ferries
- Soft via routing: The route goes by the city specified as a via point, not through it (e.g. from Munich to Berlin "via Regensburg" instead of Nuremberg)

Truck routing

- Consider 'truck attributes' when calculating truck routes: information on height, weight, hazardous goods and other restrictions
- Give preference to motorways and trunk roads; avoid most residential areas
- Take driving times and rest periods into account
- Our maps are permanently extended. For detailed information concerning the map coverage please contact our sales department

Dynamic routing

Varying driving speeds on identical road sections at different day times can be taken into consideration. E.g. low speed from 8:00 to 9:30 every weekday and maximum speed during the night.

Logistics optimization

- Take breaks and stay times into account
- Take specified starting or arrival times into account
- Optimize the sequence of stop-off points if there are more than three on the route

Toll calculation

- Calculate toll costs for many European countries (see image)
- Avoid toll roads
- Calculate various tolls by date for all concerned countries
- Consider future toll costs by mixing various toll scenarios

Emission calculation

- Visualize your CO₂-emissions with the inclination based HBEFA 3.1 emission calculation
- Basis for verifiable compensation solutions and improvement of carbon footprint

Geocoding

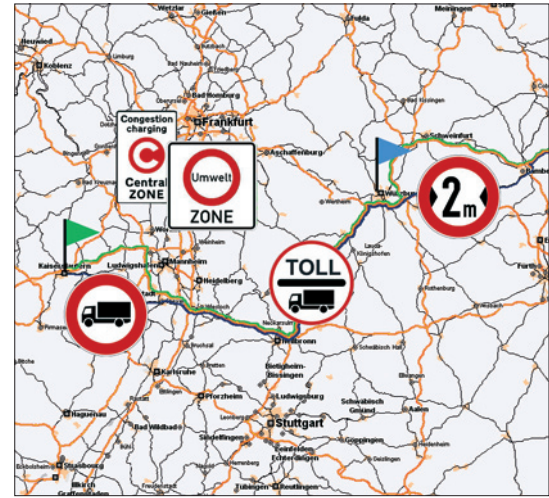
- Address geocoding (converting a mailing address to a geocoordinate)
- Select your preferred error tolerance for address entries: accept identical sounding (phonetic) or similar addresses (fuzzy)
- Advanced filtering of additional house number information
- Reverse geocoding: determine the address for a particular geocoordinate (e.g. GPS position)
- Validate addresses

Radius search

- Radius search / search for next based on direct distance, travel time or road distance
- Corridor search: search the surrounding area along a route (e.g.: "Which customers can a driver visit on a trip from Frankfurt to Munich if he detours up to 20 km from the direct route?")

Tracking and tracing

- Locate vehicles and dynamic objects in real time
- Display their current position on a map
- Reconstruct a completed route based on recorded GPS points ("road matching")



Address management

- Import and manage your own addresses
- PTV MapServer uses these addresses to generate an address layer in Microsoft Access, SQL Server or an Oracle database
- Addresses can be displayed on the map and utilised in routing and radius searches

RoadEditor

RoadEditor lets you make changes directly to the road network by blocking or releasing individual segments of the road. PTV MapServer takes these blocks or releases into account when calculating routes. The average speed of these segments can be adapted.