

PTV MapServer

Mapping and 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, or toll calculation. 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, DB2, 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 for the map data. PTV MapServer supports Windows 2000 and up.

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 customisable
- 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 and toll calculation

- Calculate the route, road distance, travel time and travel costs
- Unlimited number of stop-off points
- Fastest / shortest routes available
- Create customised 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)
- Calculate toll costs for many European countries (see image)
- Integrate and leverage traffic information (requires additional data)
- Avoid toll roads
- Utilise 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

- When calculating truck routes, PTV MapServer considers ‘truck attributes:’ information on height, weight, hazardous goods and other restrictions. Truck attributes are available for the following countries: BeNeLux, Denmark, Germany, Norway, Austria, Sweden, Switzerland (see image)
- Give preference to motorways and trunk roads; avoid most residential areas
- Take driving times and rest periods into account

Logistics optimisation

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

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)
- 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 (ex.: “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: block and release roads

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.

