

Your WebGIS for transportation and shipping



Customer requirements

In Transportation and shipping an aging and maintenance-intensive infrastructure, congestion, constant transformation of demand and ever-changing frameworks of legal, environmental and safety aspects have to be dealt with. You have to have all of your infrastructure objects, their properties and upcoming tasks constantly monitored – in real-time wherever possible. As a decision-maker you rely on management technologies and planning aids based on location.

Using WebOffice you will screen and edit your data in a browser based GUI that is easy to use. At your fingertips a customizable suite of productivity tools will assist you in any task: Capture data in a central data repository, publish services or offer results as maps, plots, elaborate reports. Share what the teams in your enterprise need. It is only a few steps to define a project including a role-based user model, process-oriented tasks, a tight security-framework and individually configurable clients for your use in the office, on public websites or on a field-crew workers mobile device.

Functions and Workflows



Create and maintain locational data

- Location-aware, attributed and mappable real estate, sites, roads, rails, ramps, construction sites, signs, lighting, signals, tunnels, events, gates, security features, environmental installations, sensors, land to be mown, ...
- Link additional data (e.g. wiring schemes, pdf-documents, photos, videos, inspection certificates) to your assets
- Make use of other public sources



Supply information systems for up to date status retrieval and analysis

- Use a map-based interface to view, query and analyze real-time data as maps (e.g. Inventory, Status, Accidents/Outage, Winter services)
- Search through all attributes of all layers with the configurable full-text-search
- Geo-locate Webcam-Livefeeds out of the map



Plan maintenance and future development

- Analyze transportation flows, display on maps, conduct statistical analysis and plan ahead
- Visualize emergencies, natural hazards or pollution (noise, dust, oxides of nitrogen, ...)
- Assess outreach, find objects (e.g. trucks of type, people with skills, machinery) in a defined vicinity
- Trigger activities for affected people/elements (e.g. serial letter, report, work order)



Accurately locate objects/events along linear features

- Linear Referencing: Locate positions along a segment by its distance from a reference point
- Retrieve 3D-distances which take terrain changes into account



Fine-grained control of user-rights for editing, viewing, querying

- Detailed control of access and read/write/create rights (e.g. with LDAP)
- Implement approval processes, define collaboration and sharing, ensure data integrity & safety



Field work mobile solution and enhanced routing for enterprises

- Data entry of attributes and editing of geometry via mobile touchscreen device (e.g. inspection record, damage, landmark, sign, ...)
- Offer extended routing that includes on-site navigation for your own roads/assets
- Document damages/accidents/maintenance needs using geo- or object-related photos. Upload them and retrieve them via the map



Use extended print/plot features

- Plot series: Select an extent that will result in a series of pages with the same scale
- Index plot: Maintain scale for linear features across multiple pages



Create first-class reports

- Make use of reports to chronicle data, measurements, records, damages, toll, ...
- Any measure taken can immediately be documented with a predefined report
- Adjust object-labels according to the current need by using multiline free labeling



Integrate third party systems

- Use existing APIs to link to other software packages (e.g. BI, external databases, technical software, a sign database)