

SuperMap iDesktop 9D Main Functions

SuperMap iDesktop 9D Rich GIS functions have been provided. Modules provided include data processing, mapping, 3D application, spatial analysis, network analysis, nautical chart management, extension development. Specific functions for those modules are introduced below.



Managing Data

- Following formats are allowed to be imported: MIF, TAB, SHP, WOR, DXF, DWG, PNG, TIFF, GRD, Excel, etc.
- Data conversion for different data formats are supported.
- Datasets of different geographic formats can be opened, created, copied, deleted.
- Different types of engine data including Oracle, SQL Server, PostgreSQL, DB2 and Web map data including OGC services, REST services, Google Maps, Baidu Map, SuperMap Cloud Services, Tianditu Services, OpenStreetMap, etc. can be opened.

Data Processing

- Basic functions such as projection setting and data registration, etc. are supported. Complete and advanced data editing functions are provided.
- Rich vector data and raster data processing functions are provided, such as dataset dissolve, append row, append column, map clip, raster mosaic, resample raster data, reclassify, etc.
- Topology functions such as topology checking, topology processing, construct regions through topology, etc. are provided.
- 2D and 3D cache generation functions are provided. For example, users are allowed to generate 3D cache for massive image, terrain, model data.

Mapping

- Map display, rendering and editing functionalities are provided.
- Different types of thematic maps are supported. Supported thematic maps include unique values map, ranges map, label map, graph map, dot density map, custom map, raster unique values map, raster ranges map, etc. Thematic maps are allowed to be created and edited.
- Layout functions for maps are supported. Users can add necessary map elements for maps, including map name, legend, north arrow, scale, grids and graticules.
- Rich symbol resources and efficient and easy-to-use symbol manager are provided. Symbol gradient, transparency, color settings are supported to enhance the beauty of the map.
- Automated mappings is supported.

3D Applications

- Display and browsing of data from different sources are supported. Supported data include image data, terrain data, 3D model data, vector data and 2D maps.
- Rich and bravery 3D special effects are provide to present 3D effects for real geographic features, such as illumination, shadow, ocean water, underground 3D scene, submarine 3D effects, particle effects (flame, rain, snow, fountain, explosion, smoke and fire), etc.
- Different types of geographic measurements are supported. Users can measure distance, elevation, area, etc. according based on terrain.
- Fly management functions are provided. Users can set parameters for stops on the flying route to realize flying emulation.
- 3D spatial analysis functions are provided. Provided 3D spatial analysis function include 3D visibility analysis, profile analysis, etc.
- 2D and 3D integrated data display and operations are supported. Users can display, set styles, create thematic maps, perform fast modeling for 2D data in scene.

Spatial Analysis

- Vector analysis functions such as buffer analysis, overlay analysis, dynamic segmentation, etc. are provided.
- Rich surface analysis functions including isoregion and isoline extraction, slope analysis, aspect analysis, visibility analysis, cut and fill analysis, etc.
- Raster analysis functions such as interpolation analysis, hydrology analysis, raster statistics, etc. are provided.

Network Analysis

- Network construction functions such as construct region through topology are provided.
- Network analyses such as optimal path analysis, traveling salesmen analysis, logistics analysis, service area analysis, location-allocation analysis, closest facility analysis for transportation network model are provided. Network analyses such as tracing analysis, connectivity analysis for facility model are provided.

Nautical Chart Management

- Import and export of nautical chart applying to IHO S-57 are provided.
- Display of nautical chart of S-52 standard is provided. Moreover, display settings such as display mode, color mode, security water depth line, feature highlight display style settings are also provided.
- Feature attributes query for nautical chart is provided.
- Nautical chart editing functions are provided. Users can create a new copy of nautical chart or modify existing nautical charts. Modification for nautical charts include modifying nautical chart information, feature dataset management, water depth management, feature relationship management, topological relationship construction and maintenance, feature object editing, etc.
- Nautical chart checking functions are provided. Users can check nautical charts according to S-58 standard to ensure that nautical charts apply to certain standards.

Extension Development

- Different types of VS project templates are provided. Meanwhile, iDesktop toolbox, iDesktop quick reference have been integrated into IDE for user convenience.
- User interface customization is supported. Users are allowed to reorganize interface elements through work environment designer.
- Plugin customization are supported. Users can develop new plugins to extend desktop functions.