

IBM Geographic Interface for Windows

Highlights

IBM Geographic Interface (called geoInterface) enables geo-referenced information on your stationary desktop or portable PC. A special feature of geoInterface is the availability of the complete data structure of IBM GFIS applications on a PC in combination with object-oriented programming techniques.

Enhance the quality of numerous business processes via geo-referenced information

- geoInterface is a PC-based and easy to operate application platform with graphic user environment, pre-configured GIS functions and interfaces to facilitate its integration throughout all company applications. The **Entry Edition** is intended for standard 'view only' and analysis related tasks, while the **Advanced Edition** is used for creation of new objects or custom application development.
- Besides supporting typical GIS-applications like facilities management, network information management and demographic analysis, geoInterface also paves the way to embedding geographical data into many enterprise business processes, such as Workflow, Customer Information Services. This versatile environment can offer benefits and more productivity to a vast range of industries like utilities, telecommunication, transportation and government by its capabilities to visualize, maintain and analyze geographical data.

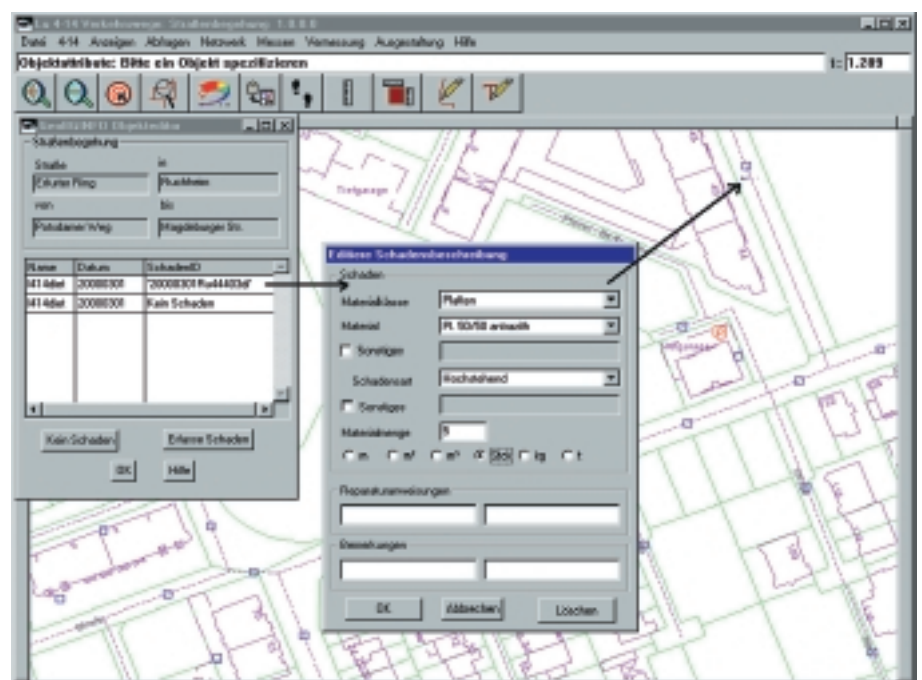
Compatibility with IBM GFIS

geoInterface is a member of the IBM GFIS product family for the implementation of Geo-Facilities Information System. As geoInterface uses the same customer-tuned object definitions and symbols belonging to other IBM GFIS software products (geoManager, geoManager/6000, GPG and geoGPG), it is therefore possible to make all graphic, alphanumeric and topologic information available on a PC, thereby enabling consistent access to all geographical data of a customer's environment. This special feature of geoInterface vastly extends its scope of application and makes it even more valuable for your company.

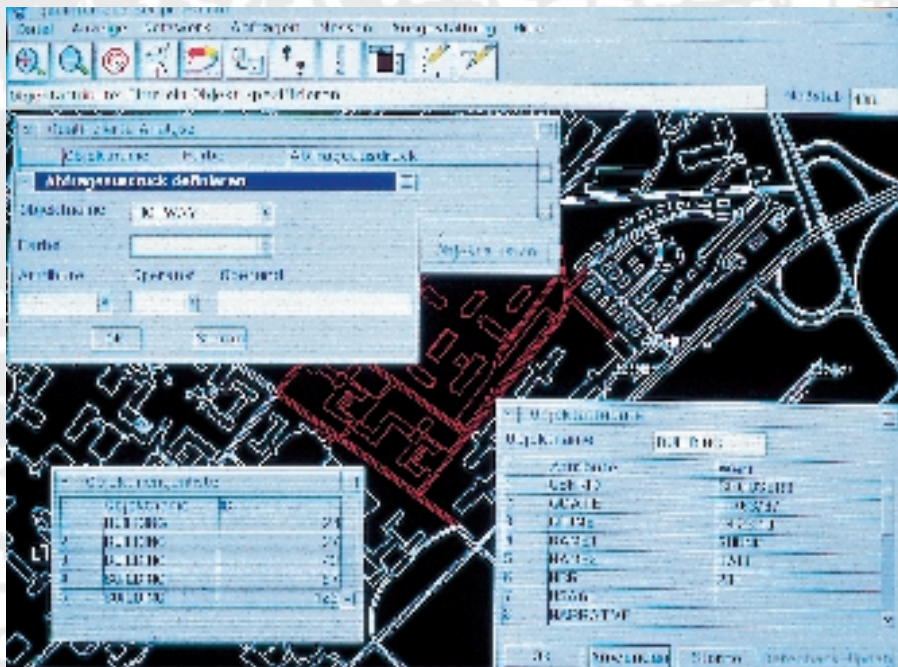
Mobile application of geo-graphical data while travelling

When geoInterface is used in "de-tached" mode, it is possible to directly access all geographical data using Interface Format Files (IFF) which were previously extracted from the geoManager database and downloaded into the PC.

This is of particular advantage to the GFIS users who wishes to utilise such geographical data to include a complete data structure on a laptop while working out of the office. An illustrated map can then be annotated by text or graphic remarks. Objekt data can be added or modified in the field to be uploaded to the database upon returning to the office.



Creation of new objects to identify and categorize street damages (a geoInterface application for mobile PCs by GKI mbH, Germany)



geolInterface includes a ready to use graphical user interface as sample application

geo-referenced database information

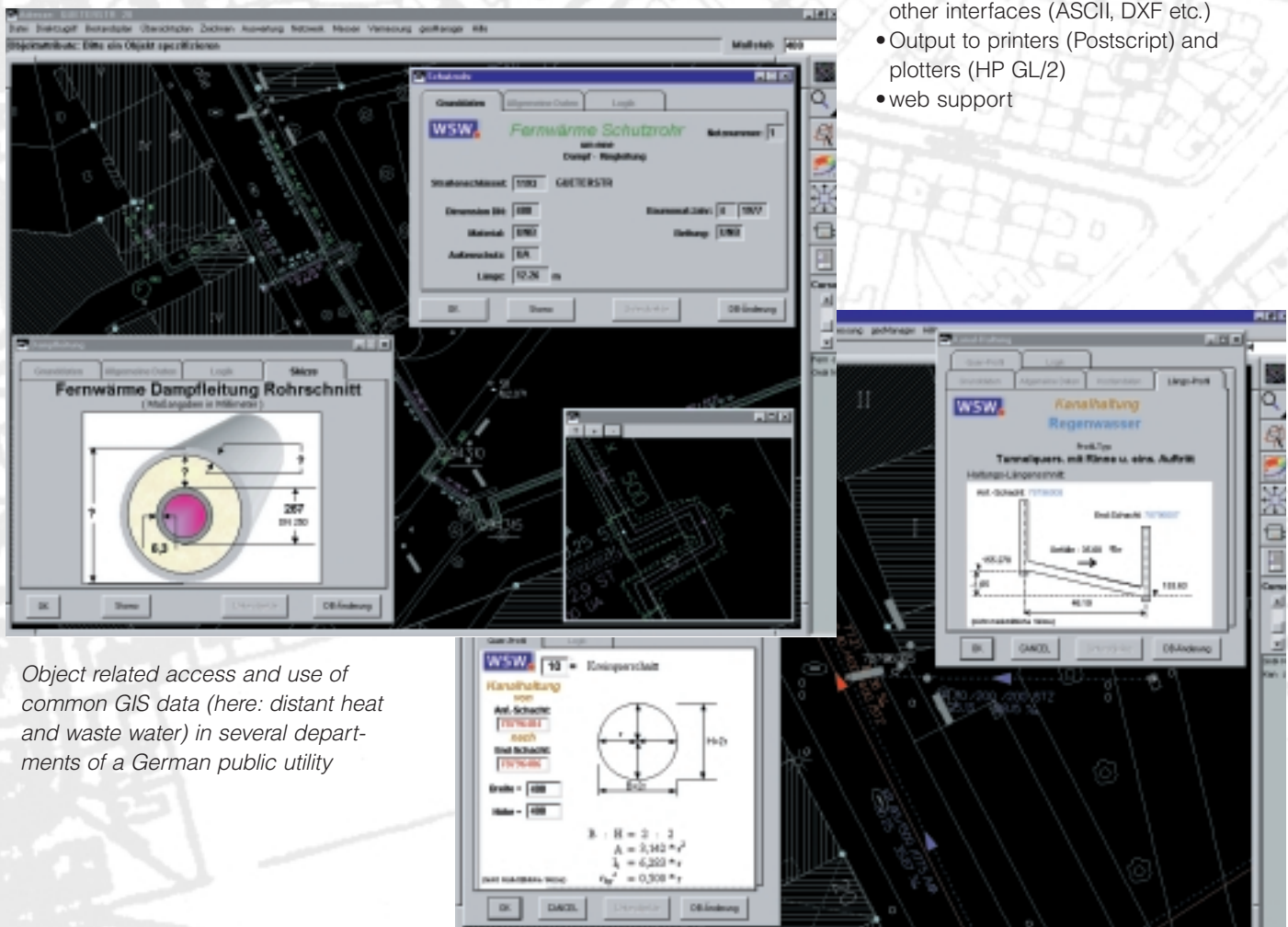
geolInterface can also operate as a PC client with a geoManager/6000 server in a TCP/IP network. The object-based geo-referenced data is extracted from the database and then read into a workspace. As a web server application,

geointerface can deliver spatial data over the Internet or Intranet in a variety of formats, including DXF, GIF, IFF and others, making it very easy for any company to provide geo-data directly to their customers, suppliers and partners via the Web.

GIS functions for versatile applications

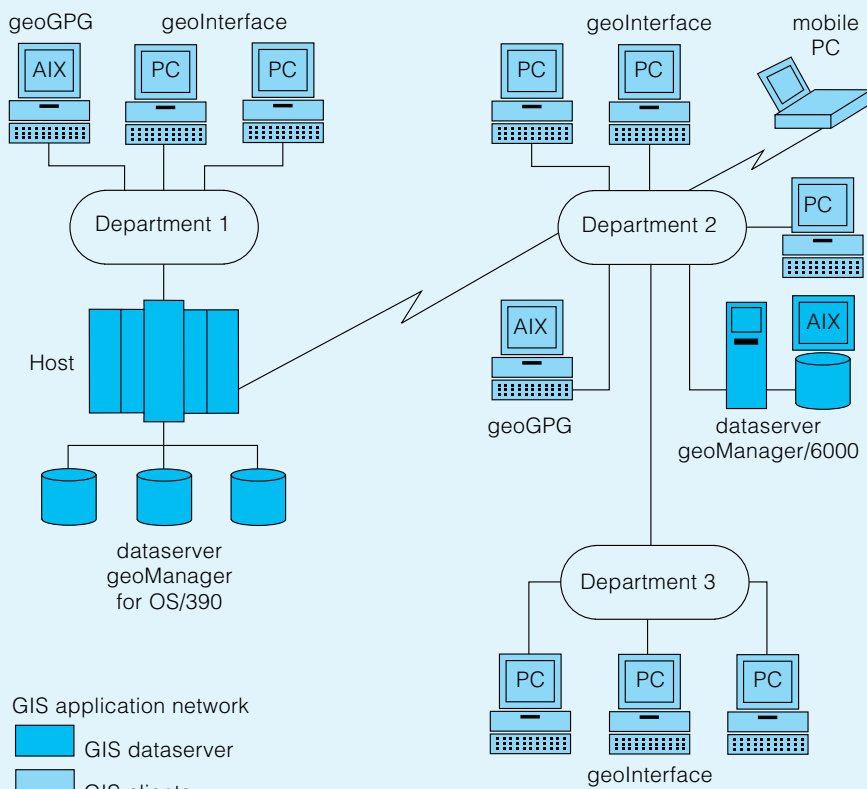
geolInterface shares the same object-based data model of other GFIS applications, making the data available on a PC. It is equipped with an easily understandable graphic user environment and a multitude of basic GIS functions to process geographical data which can be activated via selection menus or by "point-and-click" on the monitor:

- Object selection and data display
- Area-, network-, and data-related queries
- Data modification and update transfer into the database
- Creation of individual logical views from the total set of data
- Combination of raster-images and vector-graphics by layer
- Measurement of areas and distances.
- Scale modifications; pan- and zoom-functions
- Network trace and polygon creation
- Digitizer support
- map illustration by graphic and text annotations
- Adjustment of graphic attributes and map backdrop
- Functions for business graphics
- Data transfer into other applications via clipboard, metafile, imagefile and some other interfaces (ASCII, DXF etc.)
- Output to printers (Postscript) and plotters (HP GL/2)
- web support



Object related access and use of common GIS data (here: distant heat and waste water) in several departments of a German public utility

Geographical data in company-wide client/server link



geoInterface-application using Windows and a C/S-network

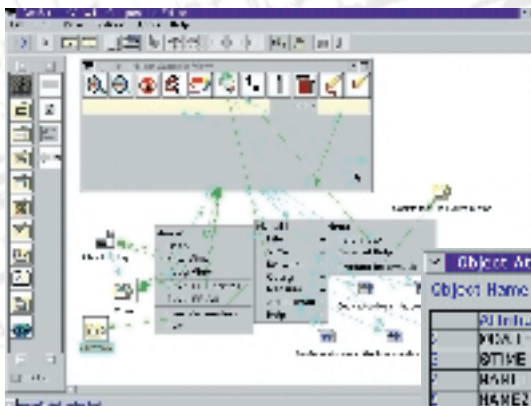
All geographical data can be shared enterprise-wide between clients and servers (for OS/390, AIX and Windows NT)

Object-oriented developer environment

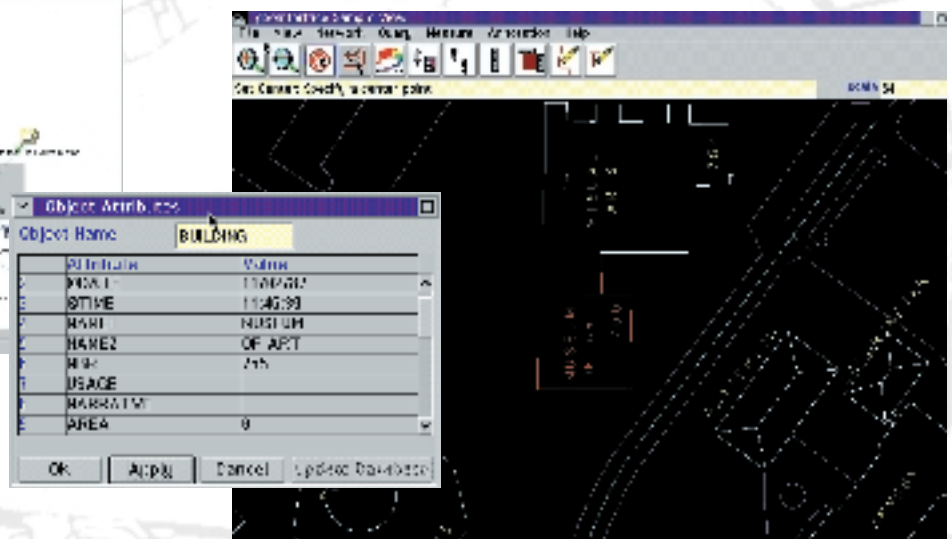
The Advanced Edition of geoInterface is equipped with a wide range of GIS components and special user developer functions so that geoInterface can be quickly integrated into another application or to modify it to the user's specific

requirements. These specific GIS "parts", which were generated in the object-orientated language "Smalltalk", can – when aided by the visual graphics developer environment "VisualAge" – be complemented by other "parts" to form new application components. In addition to the Smalltalk parts, it is also possible

to use the C-API – which is included in the Advanced Edition – in order to integrate geoInterface into customer-own C or C++ applications that can display or analyze geographical data. In addition, a client programmer interface to geoManager/6000 is also available.



Object oriented rapid application development using IBM VisualAge and geoInterface Advanced Edition



Productname	IBM Type/Model	IBM Partnumber
geoInterface for Windows – Entry Edition	5639-A76	83H-2760
geoInterface for Windows – Advanced Edition	5639-A76	83H-2776

The Entry Edition of geoInterface also includes a prepared application example containing all necessary basic functions, such as pan and zoom, object selection, data display and modification, queries on a defined polygon and network trace. This Entry Edition enables all functions that are used for all the standard 'view objects only' related tasks, while the Advanced Edition is needed, when object creation with geoManager update is wanted. Additionally, the Advanced Edition includes the tools to enable fast and simple application development with object-orientated GIS "parts" based on "Smalltalk" and C-API.

Providing spatial data support with the Internet (www)

geoInterface is a powerful 32-bit application, which also can be used to provide geo-data via the World-Wide-Web to clients easily. In this case a standard browser is needed on client-side. Thus, geoInterface is able to support e-business applications by geo-referenced data.

Hardware requirements

- 120 mHz Pentium IBM compatible PC
- 16 MB RAM for Entry Edition or 32 MB RAM for Advanced Edition
- 20 MB free space on hard disk for installation of geoInterface
- CD-ROM
- VGA monitor (minimum)
recommendation: XGA or SVGA with 256 colours and 1024 x 758 minimum resolution

Software requirements

- Operating system Windows 95, Windows 98, Windows NT or Windows 2000
- TCP/IP (for client / server communication with database)

Additional software requirements

- IBM VisualAge for Smalltalk, Professional Version 4.5 (for Windows) if the application development is to be carried out with geoInterface VisualAge Parts
- IBM VisualAge for C++, Version 3.5 (for Windows) if the application development is to be carried out which the aid of C-API

How to obtain advice on GIS

Detailed information to IBM GIS products, its requirements and capabilities are available from the publisher or IBM GIS homepage
<http://giswww.pok.ibm.com>.

Publisher

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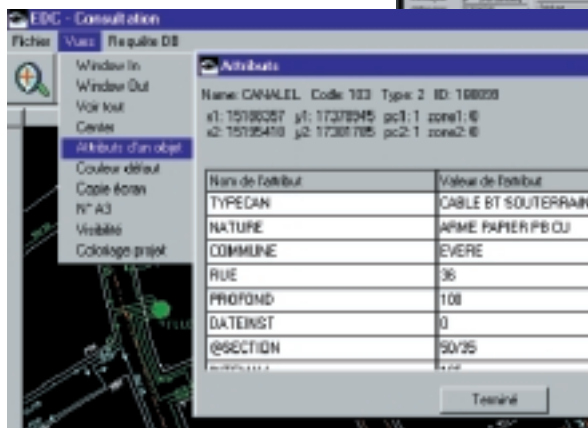
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geoInterface provides the functionality to tailor the graphical user interface to specific requirements as illustrated in these examples from Netherlands (above) and Belgium (left).