

Database

Bring Your Data to the Surface

Gemcom GEMS™ – Collaborative geology and mine planning supporting cross-functional teams.

Creating and maintaining a central repository of your project data will reduce errors and improve productivity. Gemcom GEMS™ simplifies the database building process by allowing you to easily combine data from several sources. Multi-user network awareness increases productivity by allowing staff members at any location to share data or work with the same data at the same time. GEMS' smart tools for data validation and flagging of out-of-bound or invalid samples give you confidence in your results. The system also provides an extensive set of filtering and manipulation functions, and ODBC compliance means you can use Microsoft Access or other database tools to manipulate your data if you prefer.

Each GEMS project database holds one or more workspaces, each of which contains a header table, often linked to several related secondary tables. Each row in a table represents one data record divided into several columns or fields. GEMS provides one editor for defining and changing the structure of your workspaces and tables, and another for entering and editing your data records in a spreadsheet format.

General Features

- Follow a wizard through the process of structuring your workspace and tables.
- Enter drillhole, point, polygon, or traverse data records in a format of your choosing, or use a suite of interface utilities to merge data from various sources.
- Identify duplicate or mishandled records and Interpolate missing data.
- Filter and manipulate the data to your liking, then extract it, analyze it, plot it, summarize it in a customized report, or export it to a Windows spreadsheet or reporting program.

Data Sharing

- Share data with other ODBC-compliant database applications.
- Share data simultaneously among multiple, remote users.
- Workspace locking prevents other users from unintentionally overwriting data (Enterprise).

Data Merging and Importing

- Formatted for use with other geological software packages.
- Merge and import data as text files extracted from other database programs.

Data Exporting

- Export data to third-party product formats, such as spreadsheets, reporting, and graphing systems.
- Export data as filtered extraction files for statistical evaluation, or use in solids modelling, block modelling, etc.

Structured Workspace Creation Using Microsoft Access or Microsoft SQL Server

- Follow a wizard to establish table relationships and to format data fields.
- New wizards allow for the simultaneous creation of multiple workspaces when it is necessary for applications with many workspaces (i.e. survey, pit design, long-term planning).
- Choose from drillhole, traverse, point, polygon, and custom workspace types. There are several workspace types and subtypes available. All data can be stored in workspaces.
- Enter your choice of data components.

Access Database Maintenance

- Compact data to save disk space. Compact and repair utilities comprise one executable, which can run from either inside GEMS or separately.

SQL Database Maintenance

- Options are available for SQL databases that allow for handling of e-mail notifications and other events.

Table Editing

- Use the comprehensive set of Workspace Editor menu commands and shortcuts to easily enter and edit data records in spreadsheet view.
- Enter extensive notes into memo fields.
- Employ special values to account for out of bounds or invalid samples.
- Sort records by field.
- Resize, rearrange, protect, or hide columns.

Data Validation

- Identify incorrectly entered or inconsistent data.
- Identify duplicate fields or duplicate spatial data.

Data Filtering

- Create filters to select subsets of data meeting specified conditions.
- Create SQL filters to select input from SQL databases.
- Create key indices to specify record sets for processing.

Reporting

- Report the status of the workspace and its records, or show the workspace structure.
- Customize report layouts for printing, text export, or display to the screen.

Data Manipulation

- Use mathematical and logical operators to alter data.
- Interpolate missing record or field values.
- Transfer data between tables.
- Format string fields.

For more information email gems@gemcomsoftware.com

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