DIAB SOFTWARE

MIMER Tools

MIMER System Development Tools

MIMER has efficient facilities for application development, data presentation and text management.

As a basis for all tools, the famous MIMER DATA BASE handler is known for efficient, secure and fast data handling.

Application development tools included in MIMER are:

o MIMER/SH screen handler system
o MIMER/PG application generator

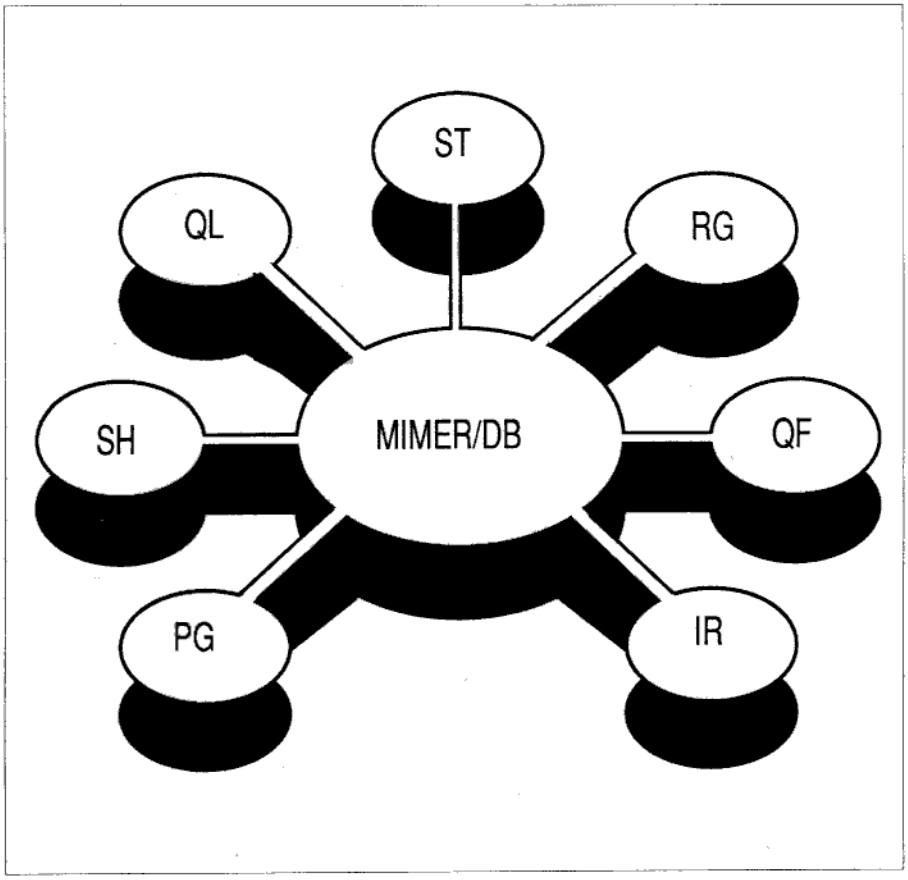
Data presentation features included are:

o MIMER/QL query language
o MIMER/RG report generator
o MIMER/ST statistics
o MIMER/QF query-by-form

And for document management applications, MIMER contains:

o MIMER/IR information retrieval

By using MIMER as a development aid system, solutions can be produced faster than with conventional technology. The result is user-friendly, flexible, portable and easy to maintain.



MIMER/DB

The MIMER/DB data base handler is based on the relational data model. The handler's function is to transfer data between the data base and other parts of the system. MIMER/DB is a stable, secure and fast way to handle data and the functions are easy to learn.

MIMER/PG

MIMER/PG is a system allowing the user to develop and generate application programs in FORTRAN or COBOL without conventional programming. MIMER/PG is an application generator, a 'fourth generation language', that makes it possible to develop and test applications in a very short time. This can often be done by the end users themselves.

In fact, MIMER/PG is an interactive system including modules for:

- o database operations (an expanded MIMER/QL)
- o specification of application systems
- o library functions (storing, retrieving and modifying defined applications)
- o program generation (transfers specified applications to FORTRAN or COBOL code)
- o installation of new functions in MIMER/PG

While specifying an application, a model is defined which can be tested directly. The application can easily be redefined if the expected or desired result is not obtained. Once the user is satisfied with the application definition, the program generator functions can be executed to obtain COBOL or FORTRAN programs which more efficiently produce the same result.

Generated applications can be transferred to another computer system, since MIMER/PG is capable of generating code suited to the compiler on a specific computer. This means that program development can take place on one computer while the production system may be run on completely different computers.

MIMER/SH

MIMER/SH is a screen handling system that is independent of computer and terminal type. It is employed

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to define screens and use them in application programs.

The screen consists of a number of fields and descriptive text. The fields are used for the input and output of information. The user can move between different fields using function keys.

MIMER/SH can perform checks on the values that have been entered, for example:

Field checks
A field
- o must be completely or partially filled out,
- o must consist of numbers or letters,
- o cannot be skipped if not filled out,
- o date check.

Validation
Checks of entered values against predefined values and/or interval.

User defined checks
- o personal registration number checks,
- o checks against matching or nonmatching occurence in the user's files,
- o checks of the user's own personal registration number.

Group checks
Checking of a group of fields that are linked together.

MIMER/SH makes it possible to modify the screen's appearance, controls and dialogue texts without any modification to the application program. Thus, expensive modification and testing are avoided and the application program remains unchanged.

MIMER/SH together with MIMER/DB makes the application program independent of computer and terminal type. The application programs can easily be moved from one computer configuration to another and, from the user's point of view, the program will behave in the same way on this machine. In addition, high conversion costs are eliminated.

MIMER/QL

MIMER/QL is an interactive query langauge, which is used to define and build databases as well as to search and manipulate data.

MIMER/QL organizes data in databanks. A databank may contain one or more tables where each table consists of rows and columns. There must be a way of uniquely identifying each row in a table and such an identifier is called a primary key. A primary key can consist of one or more columns.

A table can be compared with a card index system where each row corresponds to a card and each column to the structured information that is on each card. By making connections between different tables and by specifying conditions for the data that are in the column, it is possible to find the desired information.

MIMER/QL is used, among other things, to:

- o define new databanks
- o define new tables
- o change table definitions
- o load tables with data
- o retrieve desired data
- o change or remove data
- o insert data
- o predefine a number of MIMER/QL commands (procedures) for later regular use.

In a procedure, in addition to the usual MIMER/QL commands, there can be special functions, such as substitutions, assignments, conditional jumps, looping and menu handling.

MIMER/QL has over 30 commands, the most common ones being:

COPY TO/FROM, DEFINE INDEX, DEFINE TABLE, DELETE, DESCRIBE, EDIT, EXEC, EXIT, GET, HELP, INSERT, PRINT, REDEFINE, REMOVE, UPDATE.

MIMER/RG

MIMER/RG report generator provides a simple tool for defining a neat output format for the data in a MIMER table.

MIMER/RG consists of the following programs:

- o RGFORM supporting screen-oriented defitions of reports,
- o RGCOMP compiling report definitions for execution
- o RGEXEC executing a previously prepared report definition and generating a completed report in the form of an output table
- o RGVIEW displaying a report on the user's terminal
- o RGPRT printing a report on a printer or a sequential file

All RG programs are available as routines that can be called up from the user's own program.

MIMER/ST ranges some 40 statistical functions, including:

MEAN	mean values
DISTRIBUTION	distribution analysis
FREQUENCY	frequency table analysis
CHI-SQUARE	chi-square analysis of a given table
PLOT	two-dimensional plotting
LIFE-TABLE	survival studies
T-TEST	comparison of mean values
LINEAR-REGR	simple and multiple linear regression
ANOVA	n-way analysis of variance
MEDIAN	median decisions and median test
KRUSKAL-WALLIS	test of n independent samples
RANK-CORRE	Spearman rank correlation
COCHRAN	Cochran Q-test of n dependent samples
CURVE-FIT	curve fitting program

Reports can be defined in two ways – either by using the screen-oriented definition program RGFORM, or directly in the report generation language RGL, which is written in string in a calling program or in a sequential file. After compiling, reports can then be executed using RGEXEC, either from the query language MIMER/QL or from the user's own programs. The formatted output can be reviewed on the screen with RGVIEW and printed with RGPRT.

MIMER/IR commands:

FIND	make a query
SHOW	presents the documents that were found
DEFINE	defines system parameters
DELETE	delete queries
DESCRIBE	presents certain system information
DISPLAY	presents keyword and index tables
PRINT	prints on a printer
HELP	presents general search information
SAVE	saves queries
OWN	user defined command
STOP	terminates session

MIMER/ST

MIMER/ST is an interactive statistics system which is easy to use and which contains advanced statistics functions.

MIMER/ST can either be used as a stand-alone module or as an integrated package together with MIMER/QL.

One aim of MIMER/ST is to give a person with little knowledge of computers a simple tool for making statistical analyses. Another aim is to give him a better understanding of his material. Statistics processing can be performed on data from a MIMER table, a sequential file or on data from the terminal. MIMER/ST works with a data matrix consisting of a number of variables and a number of cases.

In order to achieve rapid I/O, MIMER/ST creates an internal ST file for each piece of new material. An old ST file can be expanded with new data from the terminal or a file. The editing transformation module is command controlled and these commands can be read from a file. The analysis is directed by the user through commands, based on keywords.

MIMER/QF features the following commands:

NEXT, CLEAR, GET, UPDATE, DELETE, INSERT, UTILITY, EXIT

MIMER/QF

MIMER/QF is a tool for manipulating the contents of a MIMER database. It is designed for entry, updating and removal of data, and allows simple data retrieval operations. One prominent feature of MIMER/QF is that it is very easy to use – everything is done via a screen formula that the user just fills out with appropriate data.

MIMER/QF works with one table at a time. The user is first asked for the name of the table to use. By typing a question mark instead of the table name, the system will list all tables to which the user has access. Once the table is specified a screen picture showing the names of all columns in the table are shown. Each column name is followed by a number of characters appropriate to the width of the column as defined in the table. The user can change the appearance of the standard screen formula by using the MIMER/SH screen handler. Moving between the fields is performed by using the terminal arrow keys. A command line displayed at the bottom of the screen lists all commands available.

By using one or more of QF's eight commands, the user is able to manipulate the data in the active table.

MIMER/IR

MIMER/IR is a computer based information management system suitable for many different applications, e. g. for product descriptions, patient journals, correspondance logging, bibliographic references, customer files, installation and service reports. In short, it is appropriate for any application where textural information plays a significant role. MIMER/IR can be used as a stand-alone module of the MIMER family, but it can also be easily integrated with MIMER/DB and other MIMER modules. This allows a user to access the textural information that develops as a part of a larger application in a powerful and appropriate manner, but to have, at the same time, full relational database facilities to apply to quantative and coded data in the same database.

MIMER/IR is a multi-user interactive IR system. As soon as one user has entered information, it becomes available to all other users immediately. The system requires no time-consuming database reorganization or updating.

One can start using MIMER/IR quickly and easily. When defining a new MIMER/IR application, the user is guided step by step by the system. MIMER/IR then creates a number of tables that will guide the users as they add information to the database.

MIMER/IR's search language is European Common Command Langauge (CCL) which is generally accepted as a standard for information retreival applications. Users who access many other IR systems using this langauge will thus feel at home with MIMER/IR as well.