Powerful Resource for Information and System Management (PRISM)

OVERVIEW

The Wang Powerful Resource for Information and System Management (PRISM) is an integrated, data-dictionary based, software system that controls all phases of data management. The features available through PRISM include entering information into the data base, selecting information from the data base that meets your criteria, processing the selected data according to your conditions, and printing or displaying results in a variety of formats. With PRISM, you can perform many operations that would normally require the services of a software professional.

The PRISM user-interface, with its menu format, is flexible enough to allow nontechnical users to get immediate results, but sophisticated enough to handle even the most complex applications. All components of PRISM are heavily defaulted to allow you to perform operations with a minimum number of keystrokes. Simply by varying selected parameters, you can immediately modify output to suit your changing needs. PRISM also provides the capability to store frequently used requests for use or modification at a later date. Because data is defined in the data dictionary, the data processing manager can maintain the data base in a consistent manner.
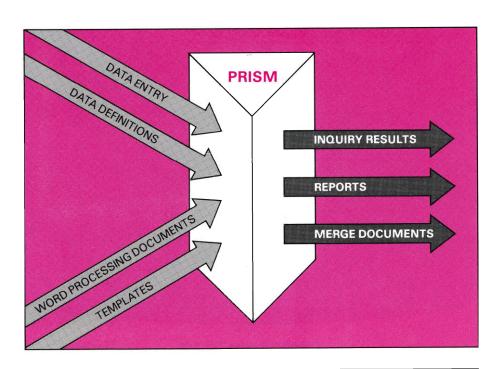
Without any programming knowledge, you can perform the following operations on a data base:

• Formulate a query upon the data base by establishing selection conditions. PRISM automatically selects information that satisfies these conditions. Additionally, you can choose to process the selected information in a variety of ways.

• Print or display the results of a query in reports and merge documents. To edit PRISM output, you can use the 2200 word processing editing features.

• Enter data into the data base. Through PRISM, you can place conditions on the entered data so that only appropriate values can be entered.

When performing a query, you specify selection and processing operations. The results of a query on the data base can have a variety of output formats, including preselected letters and reports. You can design screens for data entry and edit default report formats by using PRISM editing facilities.

SELECTION

The method for creating selection criteria is highly interactive. With a minimum number of keystrokes, PRISM leads you through the creation of a selection criterion, consisting of parameters that you select, such as data fields, comparison values, and relational operators (equal, not equal, greater than, less than, greater than or equal to, less than or equal to, is between). Using

a step-by-step process, you easily build selection criteria that can consist of over 150 selection conditions, depending on field attributes.

PRISM automatically provides box graphics that display a clear representation of the selection criteria. The software provides a simple-to-use editing capability, so that you can review and modify a selection condition at any time during its creation.

With PRISM, you can easily create the following examples of selection criteria for query against a customer information data base that contains the following customer information: customer name, address, city, state, zip code, sales territory, customer's salesman, and balance past due.

- Select all records for customers with past due balances.

- Select all records for customers in the greater New York territory.

- Select all records for customers in Boston, or San Francisco, or Dallas, and with past due balances greater than $1000.

PRISM allows you to save a selection criterion to be recalled at a later date. When you recall the selection criterion, you can use it as is or modify it before using it.
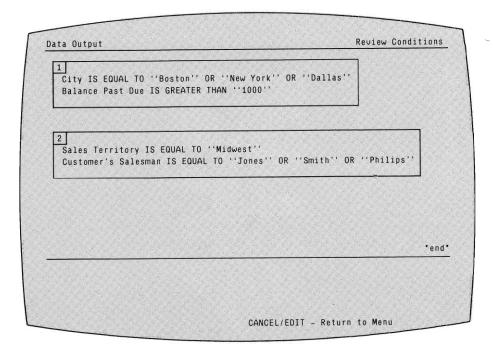
PROCESS

In addition to making a query upon the data base, you can process selected data by creating a process definition. The process definition allows you to specify how PRISM sorts and processes fields from the selected records. Like the first phase of query, the method for creating a process definition is highly interactive. PRISM provides you with prompts and default values to serve as guides.

When creating a process definition, you choose fields from the data base and process operators, such as add, subtract, multiply, divide, total, average, count, maximum, or minimum. You can select multiple fields, excluding derived fields, for sorting in a process definition. In addition, you can quickly regroup the selected records, so that you can formulate and reformulate inquiries on the data base with ease.

PRISM uses box graphics to visually represent the relationship among fields in the process definition and to represent the hierarchy created by sort groups. Powerful editing capabilities enable you to review and modify the process definition at any time during its creation.

PRISM processes the customer data base previously described by:

- Grouping selected records by territory and calculating the total of the past due balances.

- Grouping the selected records by territory, then by salesmen within the territory, and calculating the total of the past due balances for each salesman.

- Alphabetizing the selected records for each city by customer name.

```
Data Output                                    Review Conditions
 ┌─────────────────────────────────────────────────────────┐
 │ 1 │
 │ City IS EQUAL TO ''Boston'' OR ''New York'' OR ''Dallas''
 │ Balance Past Due IS GREATER THAN ''1000''
 └─────────────────────────────────────────────────────────┘

 ┌─────────────────────────────────────────────────────────┐
 │ 2 │
 │ Sales Territory IS EQUAL TO ''Midwest''
 │ Customer's Salesman IS EQUAL TO ''Jones'' OR ''Smith'' OR ''Philips''
 └─────────────────────────────────────────────────────────┘

                                                      'end'

            CANCEL/EDIT - Return to Menu
```

Sample Selection Criteria

DATA ENTRY

Through PRISM, you can define and edit screens called templates. To do this, you employ the field attributes for templates described in the data dictionary. You use the template as the form for entering data into the data base and for performing a query upon the data base.

PRISM includes many other data entry features. Through data validation, you can ensure that the data you are entering meets the specified criteria. For example, you can specify that sex can only be of two values: M or F. If you enter any other value, PRISM does not accept it.

PRISM allows you to select from three different field types: security fields, in which the characters you enter are not displayed on the terminal; required fields, which require you to enter data; and display-only fields, which you can view but can not change.

OUTPUT

Two output formats are available: reports and merged documents. PRISM output can be handled in the following ways, regardless of the format you choose for output:

- Viewed on the terminal, optionally followed by printing.

- Printed immediately.

- Edited before printing or saving.

- Saved for future use or for historical purposes.

REPORTS

You can easily produce a report from the output of a query. The speed and ease of report generation makes it possible for you to preview several report formats and to select a particular format for its visual impact, clarity, or any of its other attributes. PRISM provides a default report format that you can modify to suit your needs through an easy-to-use interactive editor. If the reports that PRISM creates are word processing documents, you can edit them with the 2200 word processing editing facilities.

MERGE DOCUMENTS

PRISM can automatically merge the results of a query upon the data base with a previously created word processing document, providing another output option. The word processing document contains the field names to be integrated with the document. You can place fields in any order within the word processing document and repeat the fields any number of times. You can edit a field through PRISM so that output is in its proper form prior to substitution into the merge document. The processed records and the merge document can be presented as a word processing document on the terminal, so you can preview or edit them.

```
                     CUSTOMER FILE DATA ENTRY



         Customer Name_John_Q._Smith_____
               Address_1945_Yemans_Street__
                  City Worcester_____
                 State MA
             Zip Code 01608
       Sales Territory New_Eng___
   Customer's Salesman Jones_____
      Balance Past Due 100_____




   .  Create     .  Define key fields  .  Read Prev (seq)
   .  Modify     ■  Find (keyed)        .  Read Next (seq)       RUN - Select option
   .  Delete     .  Find Next (keyed)  .  Erase values    CANCEL/EDIT - EXIT
```

Sample Data Entry Template

WANG

ONE INDUSTRIAL AVENUE
LOWELL, MASSACHUSETTS 01851
TEL. (617) 459-5000
TWX 710-343-6769, TELEX 94-7421

DATA DICTIONARY

All files registered in the data dic-
tionary constitute your data base.
To add a file to the data base, supply
the following field attribute infor-
mation to the data dictionary: field
size and field type (any character or
numeric, single or list). The Data
Definition Editor (DDE) of PRISM
helps define the data dictionary.
The DDE provides such extensive
field editing capabilities that even a
novice finds it easy to use. The data
dictionary supports multiple file for-
mats and access methods, including
BASIC-2 sequential files and
IDEAS-2 files.

   The DDE provides multiple
levels of service to enable both the
inexperienced user and the pro-
grammer to effectively use PRISM.
Data definitions are independent of
your application programs, giving
you centralized control over the
definitions. Defining the data base
with the Data Definition Editor
allows for minimum data redun-
dancy. For ease of use, the data defi-
nitions in the data dictionary auto-
matically become default values for
PRISM.

TECHNICAL REQUIREMENTS

PRISM has certain technical
requirements. If you want to gener-
ate merge documents or reports as
documents, the 2200 Word Process-
ing Software system must be
installed on a 2200 Series system.
PRISM requires 40K of user
memory.

Standard Warranty Applies

```
 Data Definition                                Field Definition
 Current Record: Customer File      All Customers with Current Accounts
 Field Name              Definition
 Customer Name           First/Middle Init/Last
                         Contains up to  40  characters
 Address                 Number/Street
                         Contains up to  20  characters
 City
                         Contains up to  20  characters
 State                   Post Office Abbreviation
                         Contains up to  2  characters
 Zip Code

   Type of field: ■ Single item     Type of item values:  . Any character
                  . List of items                          ■ Numeric
                                     Maximum size of item: 5____



                                          RUN - Continue
                                 CANCEL/EDIT - Previous prompt
```

Sample Data Definition

Wang Laboratories, Inc., reserves the right to change specifications without prior notice.