- Uses Graphics Extensively

- Requires No Programming

- Accesses IDEAS™ Data Files

- User-Modifiable Output Formats

- Sorts and Processes Records

- Merges and Prints Processed Records in a Report or Letter

INTRODUCTION

DATAMERGE is an easy-to-use utility that integrates word processing documents and data processing files, on the 2200 Series product line. The software is highly interactive and requires no user programming.

DATAMERGE accesses data files created with IDEAS (Inquiry Data Entry Access System) Release 1, or Release 2 software, selects records from IDEAS data files that meet user-specified criteria, sorts and processes the selected records, establishes print formats for fields of the selected records, and merge prints the selected records in a word processing document.

THE IDEAS DATA FILE

When the name of an IDEAS data file is supplied to the DATAMERGE utility, the utility automatically retrieves the data file and data defini-

tions (names of the data fields, the field lengths, and field types — numeric or alphanumeric). This automatic feature relieves you of the need to describe data formats.

Any data file you create with the IDEAS utility can be processed with DATAMERGE. The DATAMERGE utility accesses and processes IDEAS data file records without altering the IDEAS data file.

RECORD SELECTION

The Record Selection module of the DATAMERGE utility allows you to define criteria to be used in the selection of records from an IDEAS data file. The process of creating user-defined parameters is highly

interactive, and leads you through selection criteria with a minimum number of keystrokes.

The selection parameters consist of data fields, relational operators (equal, not equal, greater than, less than, greater than or equal to, less than or equal to, or is between), and comparison values joined by the logical operators, AND and OR. The Record Selection module allows you to create a selection criteria composed of over 300 selection conditions, depending on field attributes.

Through DATAMERGE, the following examples of user-defined selection criteria are easily created for a sample IDEAS file containing customer information. The fields are assumed to be Customer Name,
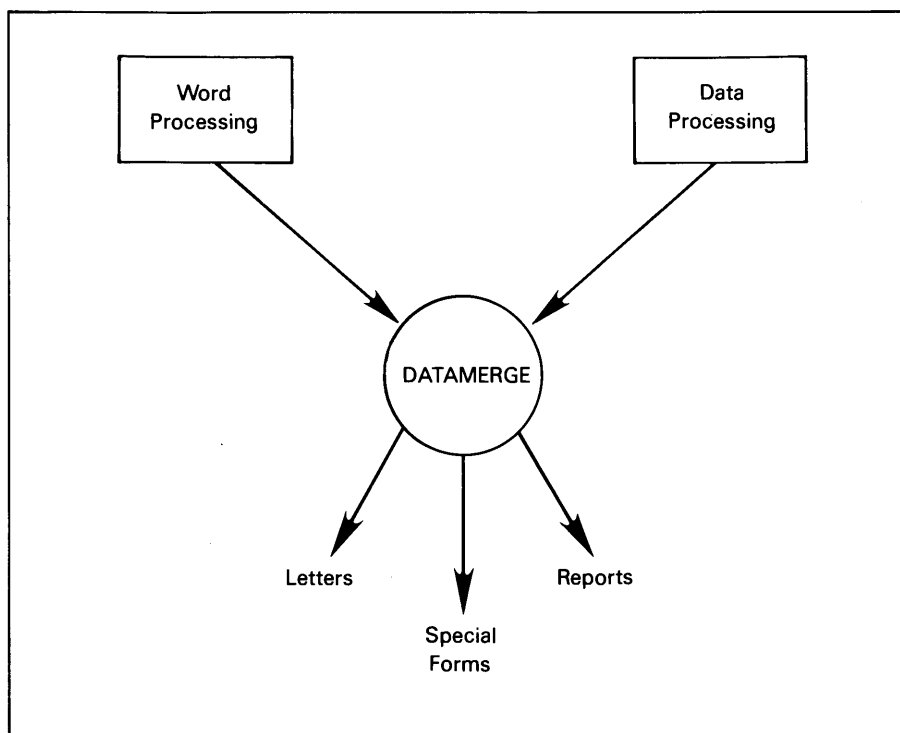
Address, City, State, Zip Code, Amount Due, and Balance Past Due.

- Select all records with past due balances.

- Select all records for customers in the city of Boston, or New York, or San Francisco.

- Select all records for customers within Massachusetts, who have an Amount Due greater than $1000.

The DATAMERGE utility automatically provides graphics to display a visually clear representation of the selection criteria. The utility provides a powerful, but simple-to-use, editing capability, so that a selection condition can be reviewed and modified at any time during its creation.

RECORD PROCESSING

The Record Processing module of the DATAMERGE utility allows you to specify how fields from the selected records are to be sorted and processed. Like the Record Selection module, the Record Processing module is highly interactive, and provides you with prompts that serve as a guide in the creation of a processing definition.

Result fields are created by the Record Processing module when you select numeric fields and a process operator (e.g., add, subtract, multiply, divide, total, average, maximum, or minimum). The utility automatically creates a field name for the result field, and lists it among the processed fields. Result field names are user-modifiable. As result fields are created, the

DATAMERGE utility automatically displays them among the processed fields.

DATAMERGE allows any field, excluding a result field, to be sorted. Multiple fields can be selected for sorting in a processing definition.

The customer-defined IDEAS file, already described, can be processed in the following ways.

- Sort records by City, within State.

- Total Amount Due, by State.

- Average Balance Past Due, by City.

- Alphabetize Customer Name, within City.

Box graphics are used to visually represent the relationship among fields in the processing definition, and to represent the hierarchy created by sort groups within sort groups. As with the record selection process, powerful editing capabilities allow the processing definition to be reviewed and modified at any time during its creation.

PRINT FORMATS

The DATAMERGE utility automatically establishes the IDEAS data file field length and field type as the print format for the corresponding DATAMERGE fields. The utility allows you to modify the data default print formats by a simple selection procedure.

```
                    Process Definition  --  Main Screen




      ┌────────────────────────────────────────────────────────────┐
      │          ┌─────┬──────────────────────────────────────────┐ │
      │  STATE   │CITY │TOT-AMT  ┌───────────────────────────────┐ │ │
      │          │     │         │F-NAME  M-I  L-NAME  ADDRESS  ZIP-CODE  AMT-DUE│ │ │
      │          │     │         └───────────────────────────────┘ │ │
      │          └─────┴──────────────────────────────────────────┘ │
      └────────────────────────────────────────────────────────────┘




              Please select an operation to perform.


      ■  Sort/Group    .  Total      .  Delete
      .  +             .  Maximum
      .  -             .  Minimum           '12 - Add/Delete fields
      .  x             .  Average           '13 - Review output
      .  /             .  Count             Return - Select
                                            CANCEL/EDIT - End Session
```

```
        Selection Definition  --  Condition Operator Display

  ┌─┐
  │1│
  └─┘
   CITY     IS EQUAL TO  ''BOSTON''   OR   ''SAN FRANCISCO''   OR   ''NEW YORK''



                         .  IS EQUAL TO
                         .  IS NOT EQUAL TO
                         .  IS LESS THAN
         AMT-DUE         ■  IS GREATER THAN

                         .  IS LESS THAN OR EQUAL TO
                         .  IS GREATER THAN OR EQUAL TO

                         .  IS BETWEEN


                              EXEC/RUN  -  Select Condition Operator
   Please Select a Condition Operator   CANCEL/EDIT - Previous screen
```
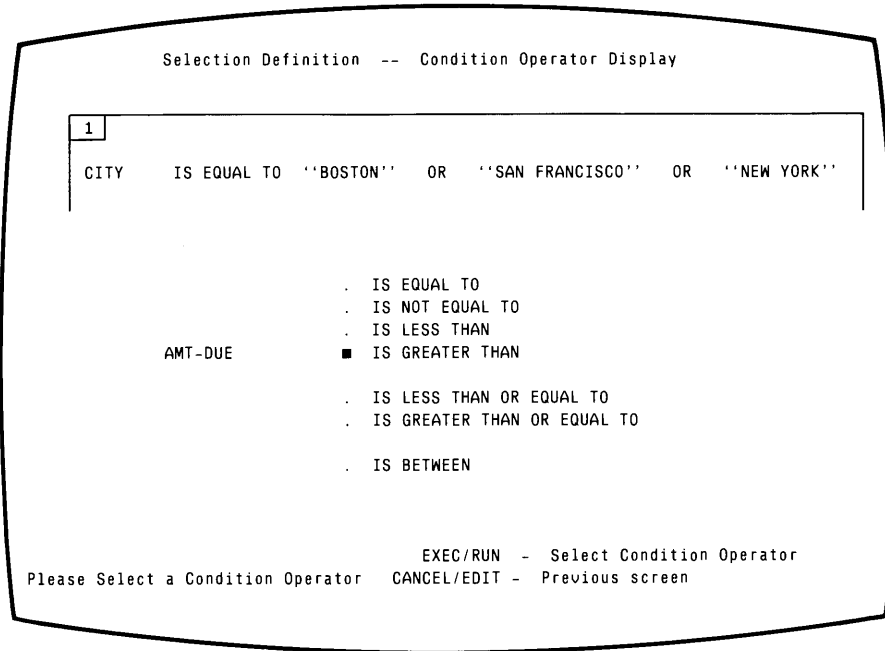
In the case of a numeric field, you can choose among several formatting options. For instance, you can choose to produce numerics that contain digit separators (,), a currency symbol ($), a leading sign, or leading zeros. In the case of an alphanumeric field, you can choose to print the field with all uppercase, all lowercase, or with initial capital letters.

To allow for special cases, special print exceptions can be supplied to the utility. DATAMERGE automatically recognizes special print exceptions and outputs them correctly. For example, if you select a name field to be output with initial capitals, you can stipulate exceptions, such as II, III, MD., DDS., and MBA.

MERGE PRINT

The DATAMERGE utility merges records with a previously created word processing document. The document must contain the field names of the processed data fields, along with special word processing merge codes. On a record-by-record basis, the utility replaces each field name in the document with the corresponding field value. Field names can occur in any order within the word processing document, and they can be repeated any number of times. The processed records and the merge document can be presented in word processing document form, so you can preview or edit them.

The selection criteria, processing requests, and print formats created with DATAMERGE can be saved and recalled for future use. As an option, the merge print module of DATAMERGE can be invoked from user application programs, automatically recalling saved selection criteria.

DATAMERGE provides the 2200 Word Processing Print Document menu to control printing of the merged document. Prior to displaying the Print Document menu, the utility provides you with a count of the number of data file records that satisfy the selection criteria.

TECHNICAL REQUIREMENTS

The 2200 Word Processing Software system must be installed on a 2200 Series system before DATAMERGE can be run. DATAMERGE requires the same user memory as the 2200 Word Processing Software (i.e., no additional memory space is required).

The 2200 Word Processing Software system is described in the 2200 Word Processing Software Data Sheet (700-6560); Word Processing hardware requirements are described in the 2236DW Integrated Terminal Data Sheet (700-6564).

Standard Warranty Applies

Printed in U.S.A.
700-6859A

```
                    ┌──────────────────────────┐
                    │   Create IDEAS Data File   │
                    └──────────────────────────┘
                                 │
                                 ▼
                 ┌──────────────────────────────┐
                 │ Create Word Processing Document │
                 └──────────────────────────────┘
                                 │
DATAMERGE                        ▼
┌ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ┐
   ┌────────────────────────────────────────────┐
│  │            Record Selection Module           │  │
   │ Select Records from IDEAS Data File by       │
│  │          User-Specified Criteria             │  │
   └────────────────────────────────────────────┘
│                      │                            │
                       ▼
│      ┌────────────────────────────┐              │
       │   Record Processing Module   │
│      │                              │              │
       │   Sort Selected Data Fields  │
│      │   Process Selected Records   │              │
       └────────────────────────────┘
│                      │                            │
                       ▼
│      ┌────────────────────────────┐              │
       │ Modify Print Format of Output Fields │
│      └────────────────────────────┘              │
                       │
│                      ▼                            │
       ┌────────────────────────────┐
│      │ Option to Save DATAMERGE Definitions │      │
       └────────────────────────────┘
│                      │                            │
                       ▼
│      ┌────────────────────────────────┐          │
       │ Print Processed Records in Merge Document │
│      └────────────────────────────────┘          │

└ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ┘
```
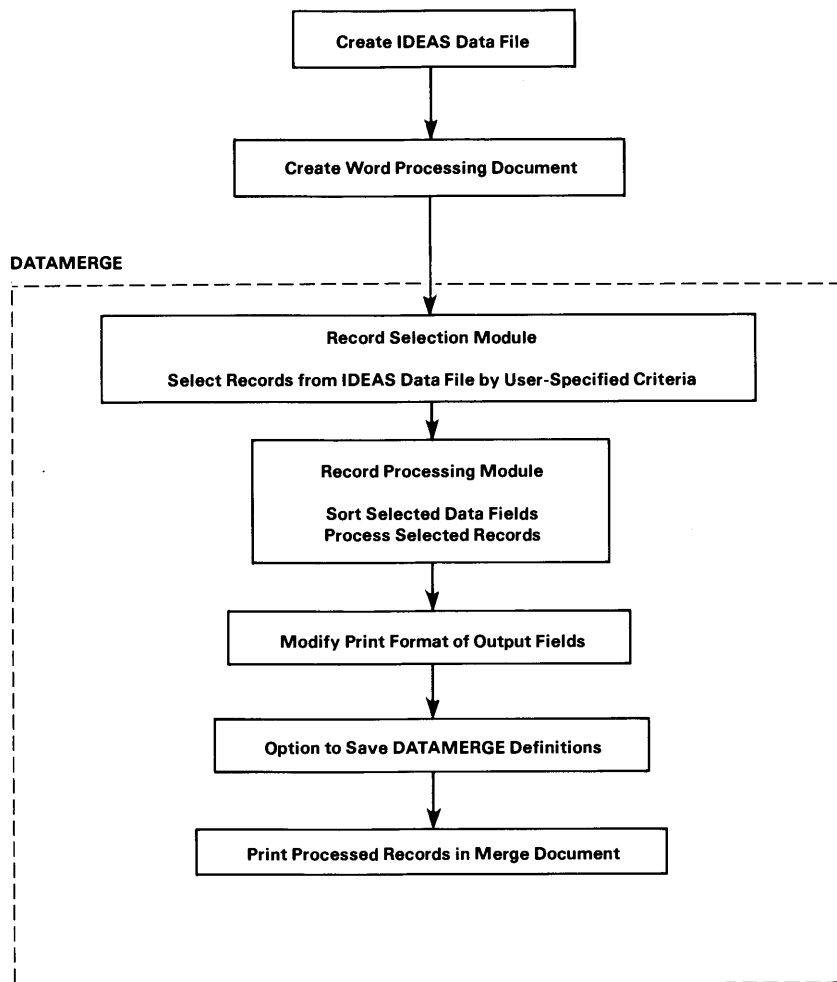
**Example Illustrating the Integration of Word Processing, IDEAS,
and DATAMERGE**

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